Present Status of
Junior College
Terminal Education

Commission on Junior College Terminal Education

Doak S. Campbell, *Chairman*
George Peabody College for Teachers, Nashville, Tennessee

Aubrey A. Douglass
State Department of Education, Sacramento, California

Leonard V. Koos
University of Chicago, Chicago, Illinois

J. C. Wright
United States Office of Education, Washington, D.C.

George F. Zook
American Council on Education, Washington, D.C.

C. C. Colvert, *Ex Officio*
American Association of Junior Colleges
Northeast Junior College, Monroe, Louisiana

Guy M. Winslow
New England Junior College Council
Lasell Junior College, Auburndale, Massachusetts

Byron S. Hollinshead
Junior College Council of the Middle States
Scranton-Keystone Junior College, La Plume, Pennsylvania

Leland L. Medsker
North Central Association of Junior Colleges
Chicago Municipal Junior Colleges, Chicago, Illinois

J. E. Burk
Southern Association of Junior Colleges
Ward-Belmont School, Nashville, Tennessee

Eugene B. Chaffee
Northwest Association of Junior Colleges
Boise Junior College, Boise, Idaho

Rosco C. Ingalls
California Junior College Federation
Los Angeles City College, Los Angeles, California

Walter Crosby Eells, *Director*

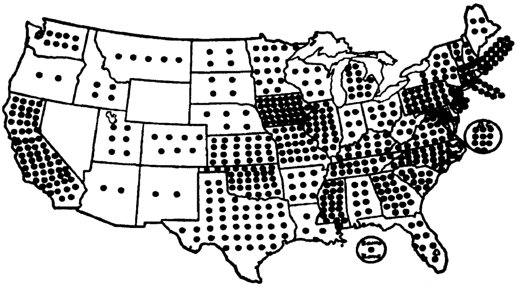
Present Status of Junior College Terminal Education

Prepared for the
COMMISSION ON JUNIOR COLLEGE
TERMINAL EDUCATION

By WALTER CROSBY EELLS
Executive Secretary, American Association of Junior Colleges

With chapters by
BYRON S. HOLLINSHEAD
EDWARD F. MASON
MAX SCHIFERL

Terminal Education Monograph No. 2



Location by States of 610 Junior Colleges in 1941

AMERICAN ASSOCIATION OF JUNIOR COLLEGES
WASHINGTON, D.C.
1941

COPYRIGHT 1941
BY THE
AMERICAN ASSOCIATION OF JUNIOR COLLEGES
WASHINGTON, D.C.

GEORGE BANTA PUBLISHING COMPANY, MENASHA, WISCONSIN

FOREWORD

THE Commission on Junior College Terminal Education was organized in September, 1939 to sponsor a nationwide study in the general field of terminal education in the 600 junior colleges of the country. The names of this Commission, representing a wide variety of junior college interests and activities, are given on another page. The activities of the Commission during the one-year period (1940) of exploratory study were financed by a special grant from the General Education Board.

Major activities planned for the year of exploratory study of terminal education included office research, field investigations, general interpretation, regional conferences, stimulation of interest, formulation of problems deserving further study, and pertinent publications. Publication of three monographs covering the important results of the one-year study was projected.

The Commission felt that it was basic to further research and to stimulation of individual institutional activity to present definite information concerning existing publications in the field of junior college terminal education, present conditions in the field of terminal education in the junior colleges of the country, and practical and theoretical reasons for the importance of junior college terminal education.

Accordingly three monographs have been prepared: *The Literature of Junior College Terminal Education, Present Status of Junior College Terminal Education,* and *Why Junior College Terminal Education?* The first of this series of basic monographs, a fully annotated and classified bibliography of more than 1,500 titles bearing on the subject of junior college terminal education, was published in March, 1941.

The second in the series is the present monograph which aims to present a general summary of conditions in the field of junior college terminal education as they now exist with suggestions of major problems deserving further study and analysis. The third monograph will appear in the near future. The present volume endeavors to answer the question *What?* The third will answer the question *Why?*

It is hoped that the present volume will prove of distinct value to junior college administrators, faculty members, graduate students, and others interested in studying various phases of terminal education, which is, perhaps, the most significant aspect of the rapidly spreading junior college movement.

The year of exploratory study revealed the need and the opportunity for a series of additional studies in special fields and for experimental investigations and demonstrations which may well cover several years of continuous effort. Funds have been made available through the General Education Board and cooperating junior colleges for such additional activities during the next four years. The results of many of these activities will, it is expected, be published in other monographs in the field of terminal education.

WALTER CROSBY EELLS, *Director*

Washington, D.C.
April, 1941

INTRODUCTION

FOR the first time in the history of the junior college movement comprehensive information is available on a nationwide basis concerning the present status of terminal education in the junior colleges of the country. A summary of this information is presented in the present volume, together with a compilation of lists of the outstanding problems in the field which are still in need of study.

Anne Morrow Lindbergh in her recent book, *The Wave of the Future,* tells of a critic who once complained to the Russian novelist, Chekhov, that he had given no solution to the problem presented in his story. Chekhov wrote back, with rare modesty for an author, that the duty of the writer was not to solve the problem but to attempt to state it correctly. The primary object of this monograph has been to state the problems of terminal education correctly, not to solve them.

Accordingly, little or no effort has been made to indicate what *should be.* It was felt that it was of fundamental importance first to have reasonably complete, reliable, and recent nationwide information of what *is.* Only then can satisfactory consideration be given to what should be and constructive recommendations be made for significant changes. We must be sure of where we *are* before we try to decide when and how and where to *go.*

Even the task of reporting adequately where we are in junior college terminal education is too great for any one author. Only the cooperation of many individuals has made this volume possible. The administrative officers of almost three hundred junior colleges furnished invaluable information on a series of blanks sent them for the purpose. Names of these cooperating institutions and copies of the blanks used will be found in the appendix.

Max Schiferl, research assistant during the year of exploratory study, is chiefly responsible for the summarization of the extensive data secured from these two sources. He also had the principal responsibility for writing Chapter V and part of Chapter VI and for the preparation of the tabular matter in the appendix.

Byron S. Hollinshead, president of Scranton-Keystone Junior College, Pennsylvania, acted as special consultant for the General Education Board during the spring of 1940 independently of his connection with the Commission on Junior College Terminal Education. During that time he had an opportunity to make personal visits to 58 junior colleges in 24 states. He reports his personal observations as a result of this series of visits in Chapter XIV.

In the preparation of Chapter XV assistance was received from hundreds of junior college administrators and others interested in the junior college movement who attended the 24 special conferences held in the spring and autumn of 1940, also from many others whose judgments were secured by mail. The material in this chapter on special problems in the field of business education was furnished by a special cooperating committee of the Department of Business Education of the National Education Association, under the chairmanship of Hamden L. Forkner of Teachers College, Columbia University; that on home economics, by a special cooperating committee of the American Home Economics Association under the chairmanship of Miss Ivol Spafford. The personnel of these two committees is given in Chapter XV.

A much more vivid comprehension of the extent and significance of many types of terminal education can be given by actual photographs than by tables or text. An oft-quoted Chinese proverb assures us that one picture is worth ten thousand words. Accordingly, a pictorial supplement of 64 pages, entitled "Aims of Terminal Education," has been prepared. By means of 126 pictures it illustrates a variety of terminal educational activities in 39 junior colleges, both publicly and privately controlled, in 19 states. This supplement is the work of Edward F. Mason, who was given a year's leave of absence from his position as assistant professor of journalism at the State University of Iowa to act as director of publication for the terminal education commission. Credit should be given also to the administrative officers of the 39 junior colleges who furnished the original photographs for this supplement as well as to the administrators of many other institutions for sending photographs which unfortunately could not be included because of space limitations. Mr. Mason is responsible also for the authorship of Chapter XIII.

The numerous charts and diagrams which give greater vividness to the presentation are the work of Mrs. Dorothy Packard.

For careful editorial preparation, supervision, and proof reading Marion Anello, editorial assistant, deserves chief credit. She has had the capable assistance of Eleanor Ackland and Priscilla Winslow.

An outline of the volume was submitted to the Commission on Junior College Terminal Education and approved by it, but the Commission did not go over the full manuscript in advance of publication. For the final form and content of the volume, therefore, the undersigned must accept full responsibility except as indicated above.

WALTER CROSBY EELLS

TABLE OF CONTENTS

FOREWORD v

INTRODUCTION vii

I. PRESENT STATUS OF THE JUNIOR COLLEGE MOVEMENT 1

II. DEVELOPMENT OF TERMINAL EDUCATION 14

III. LEGAL STATUS OF TERMINAL EDUCATION 27

IV. RECOGNITION OF TERMINAL EDUCATION BY ACCREDITING AGENCIES 34

V. TERMINAL CURRICULA AND ENROLLMENTS 47
Max Schiferl

VI. MAJOR TERMINAL EDUCATIONAL FIELDS 71

VII. INSTRUCTIONAL STAFF FOR TERMINAL CURRICULA 102

VIII. EQUIPMENT FOR TERMINAL CURRICULA 108

IX. THE LIBRARY IN TERMINAL EDUCATION 118

X. PERSONNEL AND GUIDANCE ORGANIZATION 122

XI. THE COMMUNITY AND TERMINAL EDUCATION 134

XII. FINANCING TERMINAL EDUCATION 144

XIII. BEHIND THE COUNTER THEY GO TO COLLEGE 148
Edward F. Mason

XIV. PERSONAL OBSERVATIONS ON TERMINAL EDUCATION IN SELECTED JUNIOR COLLEGES 158
Byron S. Hollinshead

XV. MAJOR PROBLEMS OF TERMINAL EDUCATION FOR FURTHER STUDY 180

APPENDIXES 211

A. Terminal Curricula Offered 212

B. Supplementary Tables 236

C. Federal Aid for Junior Colleges 244

D. List of Cooperating Junior Colleges 249

E. Forms Used 253

PICTORIAL SUPPLEMENT—AIMS OF TERMINAL EDUCATION ....64 pages, separately paged, following 262
Edward F. Mason

INDEX 327

Chapter I

PRESENT STATUS OF THE JUNIOR COLLEGE MOVEMENT

SINCE THIS MONOGRAPH is concerned primarily with the present status of terminal education in the junior colleges of the United States, it is desirable to present as a background a few facts which will give a general picture of the junior college movement as a whole and of some of its more significant details.

According to the latest available statistics, as gathered in December, 1940 by the American Association of Junior Colleges,[1] there are 610 educational institutions in the country which are classified as junior colleges. The enrollment of regular and special students in these institutions was 236,162 in 1939-40. The number of full-time and part-time faculty members in 1940-41 is 13,545.

In subsequent chapters of this monograph, in statistical tables, in graphs, and in text discussions, various groupings of junior colleges are considered. The more important of these groupings are the following:

1. *By type.* Publicly controlled, privately controlled.
2. *By region.* New England, Middle States, North Central, Southern, Northwest, Western.
3. *By size.* Small (0-99), medium (100-499), large (500-999), very large (1,000 and over).
4. *By control.* Publicly controlled: state, local. Privately controlled: denominational, undenominational nonprofit, proprietary.
5. *By sex.* Institutions for men only, for women only, coeducational.
6. *By race.* Institutions for Negroes only, for Indians.

By Type and Region

The states included in the areas of the six associations of colleges and secondary schools are somewhat different from those found in census or other classifications. Historical and educational reasons explain, if they do not justify, what at first glance seem to be rather illogical groupings of states, particularly in the case of the North Central Association. These groupings are shown in Figure 1.

---

[1] W. C. Eells and P. Winslow, "Junior College Directory 1941," *Junior College Journal* (January 1941), 11:279-300.

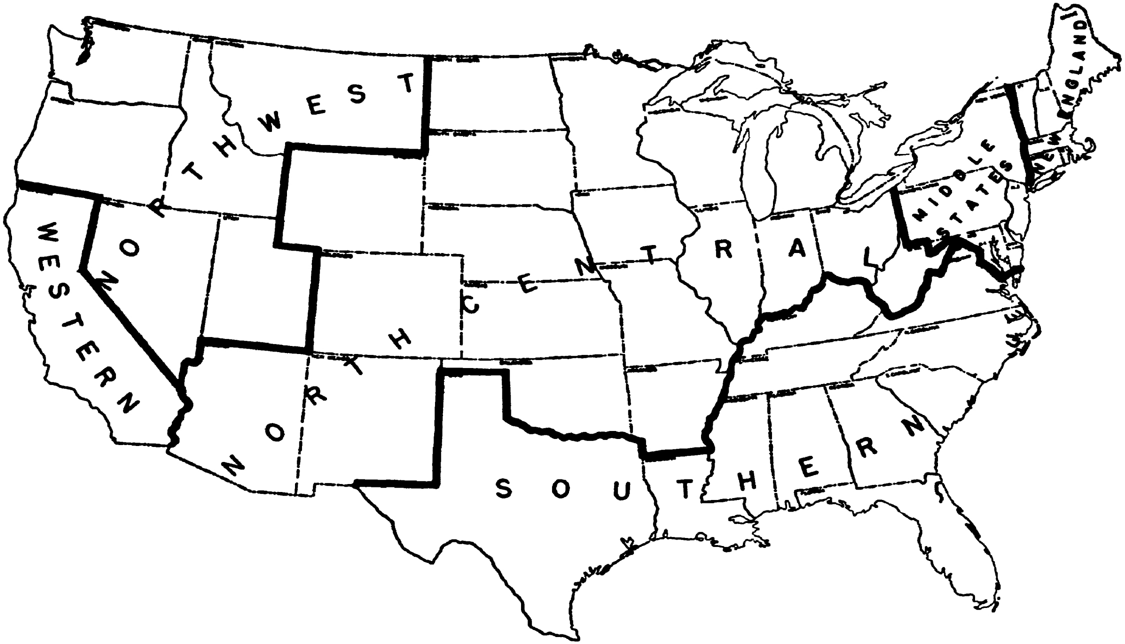


Figure 1. STATES INCLUDED IN AREAS OF REGIONAL ASSOCIATIONS OF COLLEGES AND SECONDARY SCHOOLS

(Montana is a member of both the North Central and the Northwest Associations; in this volume it is treated as belonging only to the Northwest Association.)

Table I. Summary by States and Regions of Junior Colleges, Enrollment, and Faculty Members, 1941

State or Region	Junior Colleges			Enrollment*			Faculty		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
United States	610	261	349	236,162	168,228	67,934	13,545	7,176	6,369
New England	47	0	47	10,665	0	10,665	1,077	0	1,077
Connecticut	14	0	14	3,170	0	3,170	302	0	302
Maine	4	0	4	517	0	517	70	0	70
Massachusetts	23	0	23	5,994	0	5,994	564	0	564
New Hampshire	3	0	3	530	0	530	75	0	75
Vermont	3	0	3	454	0	454	66	0	66
Middle States	67	10	57	15,399	2,974	12,425	1,384	143	1,241
Canal Zone	1	1	0	499	499	0	18	18	0
Dist. of Columbia	11	0	11	3,049	0	3,049	263	0	263
Maryland	8	0	8	1,163	0	1,163	165	0	165
New Jersey	11	3	8	2,990	1,234	1,756	196	46	150
New York	12	0	12	2,936	0	2,936	303	0	303
Pennsylvania	24	6	18	4,762	1,241	3,521	439	79	360
North Central	224	136	88	67,747	52,564	15,183	4,401	2,822	1,579
Arizona	2	2	0	1,184	1,184	0	54	54	0
Arkansas	9	6	3	2,692	2,416	276	164	133	31
Colorado	7	3	4	2,106	1,577	529	133	74	59
Illinois	24	12	12	19,589	16,574	3,015	796	524	272
Indiana	5	1	4	623	128	495	56	11	45
Iowa	36	27	9	3,768	2,554	1,214	437	291	146
Kansas	24	15	9	5,798	5,125	673	438	320	118
Michigan	13	9	4	4,187	3,779	408	267	231	36
Minnesota	16	13	3	3,326	3,062	264	278	244	34
Missouri	24	10	14	8,143	3,741	4,402	717	223	494
Nebraska	5	2	3	800	355	445	73	35	38
New Mexico	2	2	0	1,319	1,319	0	69	69	0
North Dakota	4	4	0	912	912	0	76	76	0
Ohio	8	1	7	2,203	249	1,954	144	17	127
Oklahoma	30	26	4	5,409	5,136	273	410	370	40
South Dakota	4	0	4	363	0	363	39	0	39
West Virginia	4	1	3	1,052	351	701	73	20	53
Wisconsin	7	2	5	4,273	4,102	171	177	130	47
Southern	183	56	127	47,577	24,403	23,174	3,233	1,228	2,005
Alabama	8	0	8	1,173	0	1,173	116	0	116
Florida	7	1	6	1,908	124	1,784	133	22	111
Georgia	20	11	9	5,635	4,360	1,275	340	247	93
Kentucky	14	2	12	3,514	381	3,133	212	19	193
Louisiana	3	2	1	876	781	95	70	56	14
Mississippi	22	12	10	5,205	4,156	1,049	410	269	141
North Carolina	25	2	23	6,602	1,818	4,784	450	11	439
South Carolina	11	0	11	1,553	0	1,553	110	0	110
Tennessee	14	1	13	2,860	420	2,440	284	30	254
Texas	43	24	19	15,085	11,822	3,263	818	574	244
Virginia	16	1	15	3,166	541	2,625	290	0	290
Northwest	25	11	14	8,535	5,621	2,914	577	346	231
Idaho	4	3	1	2,110	1,764	346	140	123	17
Montana	5	3	2	770	708	62	74	55	19
Oregon	2	0	2	958	0	958	74	0	74
Utah	6	5	1	3,299	3,149	150	191	168	23
Washington	8	0	8	1,398	0	1,398	98	0	98
Western (California)	64	48	16	86,357	82,666	3,691	2,905	2,637	268

* Enrollments are for previously completed academic year, 1939–40.

Table I presents the number of junior colleges, the enrollments in them, and the number of faculty members for each state and for each regional area. It shows this information not only for all junior colleges but also for the publicly controlled and privately controlled institutions separately. It may be considered, therefore, as a basic reference table.[2]

Of the entire group of 610 junior colleges, 261 (43 per cent) are publicly controlled institutions, while 349 (57 per cent) are under private control. The publicly controlled institutions, however, have much the greater proportion of the enrollment. No less than 71 per cent of the students are found in the publicly controlled junior colleges. These contrasting facts are shown in Figure 2.

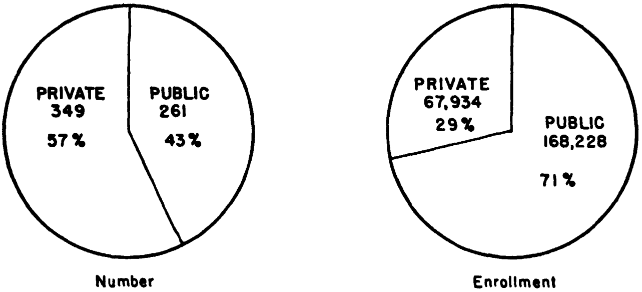


Figure 2. NUMBER AND ENROLLMENT, PUBLIC AND PRIVATE JUNIOR COLLEGES, 1941

The number of publicly controlled institutions in each state, with differentiation of symbols to show sex of students admitted and institutions under Federal, state, and local control, is shown in the map of Figure 3.

Similarly the map of Figure 4 shows the distribution by states of privately controlled junior colleges, with differentiation of symbols to show sex of students admitted.

The relative number of junior colleges in the six regional areas is shown in Figure 5. It will be noted that the widespread North Central area, including 19 states, has almost two-fifths of the junior colleges of the country, more than half of the publicly controlled institutions, one-quarter of those under private control. New England has no publicly controlled junior colleges. Each of the other areas has both types.

The picture is somewhat different, however, when enrollments in the six regional areas are considered. A summary on this basis is

---

[2] *Ibid.*, p. 281. Additional information concerning each institution may be found in this same source. For more extensive information concerning each accredited junior college, see W. C. Eells, *American Junior Colleges*, American Council on Education, Washington, D.C., 1940, 585 pages.

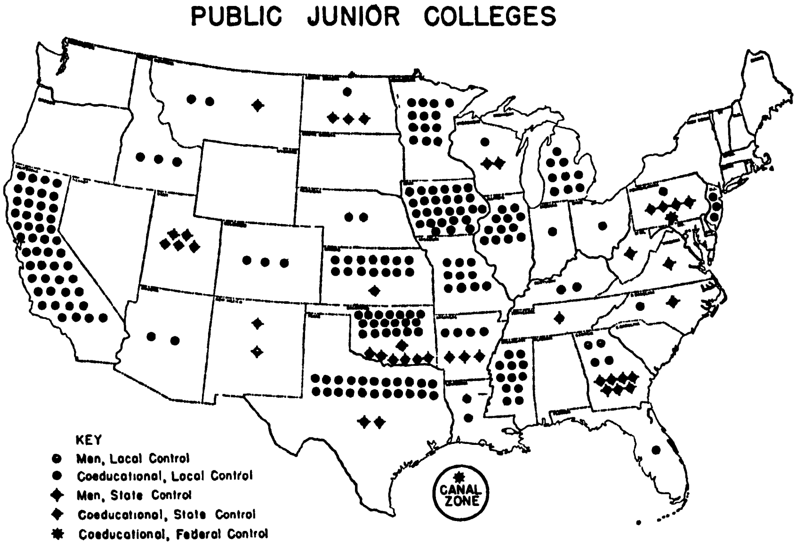

PUBLIC JUNIOR COLLEGES
CANAL ZONE
KEY
Men, Local Control
Coeducational, Local Control
Men, State Control
Coeducational, State Control
Coeducational, Federal Control

Figure 3. Number of Publicly Controlled Junior Colleges of Various Types in the United States, 1941

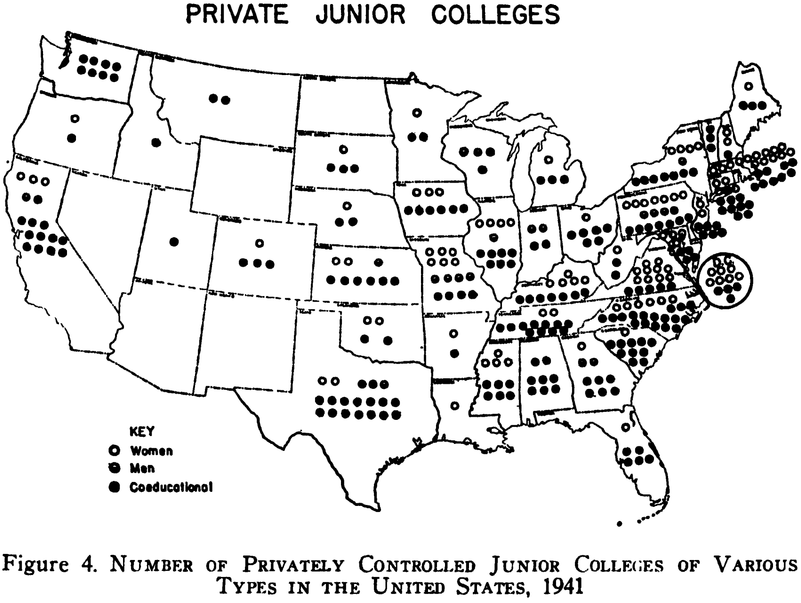


Figure 4. Number of Privately Controlled Junior Colleges of Various Types in the United States, 1941

shown in Figure 6. The most striking contrast, of course, is found in the Western area, consisting of the single state of California. Although California has only 10 per cent of the junior colleges of the country, it has more than one-third of the total enrollment. California has less than one-fifth of the publicly controlled junior colleges in the nation, but this one-fifth enrolls almost half of the students in the publicly controlled institutions in the country.

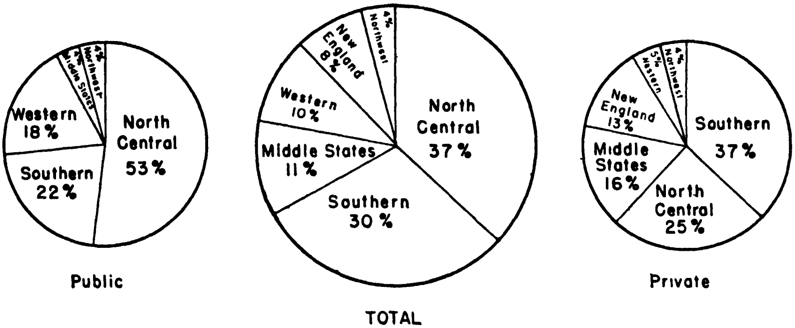


Figure 5. Proportion of Junior Colleges in Each of the Regional Areas, 1941

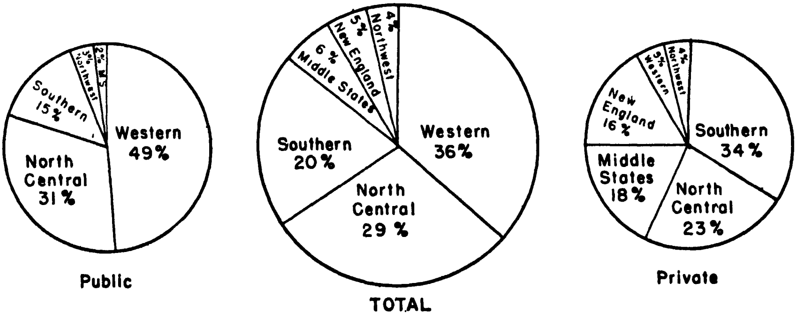


Figure 6. Proportion of Junior College Enrollment in Each of the Regional Areas, 1941

Enrollment in proportion to population. Total populations of the different states vary so greatly, as well as junior college opportunities and student enrollments, that total figures do not present a complete and satisfactory picture. It is desirable, therefore, to calculate junior college enrollment in relation to population. Total enrollment of junior college students for each 10,000 population is shown by states in Figure 7. Population figures used are those of the 1940 United States Census; junior college figures, those given in Table I. The number of junior college students in the United States is 18 for each 10,000 population. If the entire country were as well supplied with junior college students as California, in proportion to population, the enrollment would be in excess of 1,600,000 instead of only 236,000 as at present.

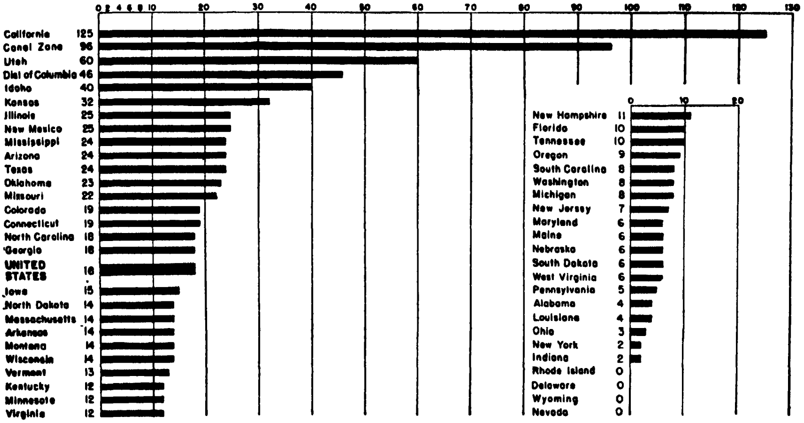


Figure 7. JUNIOR COLLEGE ENROLLMENT BY STATES FOR EACH 10,000 POPULATION, 1940 (Based upon U.S. Census for 1940 and Enrollment Data of Table I)

The irregular distribution of junior college enrollment is also strikingly illustrated by the map of Figure 8. Although California, Illinois, and Texas have only 16 per cent of the general population, they have more than half of the junior college enrollment of the country.

Historical development.[3] Although this chapter is concerned primarily with the present status of the junior college movement, and not with its historical development, information concerning number of institutions and enrollment in them for the two main groups, publicly controlled and privately controlled, can be understood better if something is known of their development during the present century. Figure 9 shows at five-year periods, beginning in 1900, the

---

[3] For more extensive historical treatment see W. C. Eells, *American Junior Colleges,* American Council on Education, Washington, D.C., 1940, Chap. II; and same author's *The Junior College,* Houghton Mifflin Co., Boston, 1931, Chap. III, IV, V.

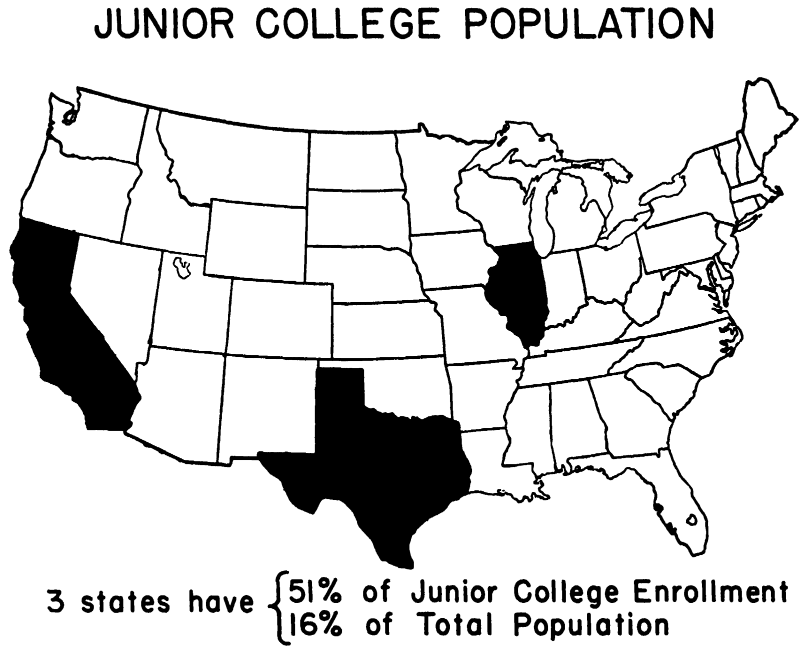


Figure 8. IRREGULARITY OF DISTRIBUTION OF JUNIOR COLLEGE ENROLLMENT, 1941

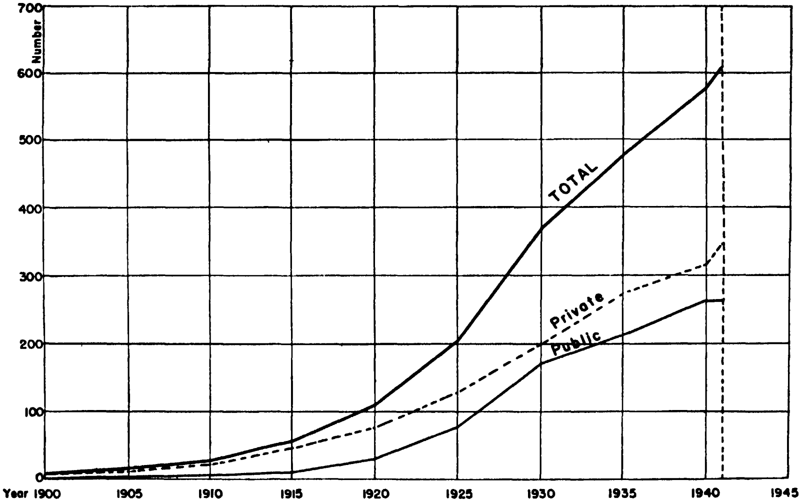


Figure 9. GROWTH IN NUMBER OF JUNIOR COLLEGES, 1900 TO 1941

number of institutions which were organized as junior colleges within each period and which are still in existence in 1941. While it required the first 20 years of the century to develop the first hundred of the present group of junior colleges, each succeeding five-year period has added another hundred or more to the total number and there seems to be no tendency as yet for this rate of growth to diminish. Growth of publicly controlled institutions has closely paralleled that of privately controlled institutions, those under private auspices always outnumbering those which are publicly controlled.

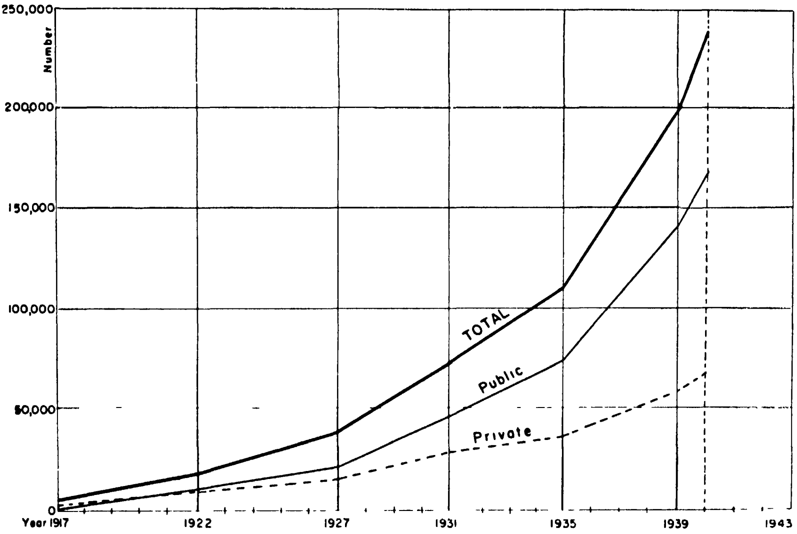


Figure 10. GROWTH IN ENROLLMENT IN JUNIOR COLLEGES, 1917 TO 1941

Figure 10 shows growth in enrollment at convenient four- or five-year intervals for which data are available. Increase in enrollment has been proportionately greater than increase in number of junior colleges—a healthy sign since it means growth in average size of institution. (See discussion of "Size of Junior Colleges" below.) During the past decade the number of junior colleges has increased 50 per cent but the enrollment in them has more than tripled. As shown in Figure 10, too, the enrollment in the publicly controlled junior colleges has increased much more rapidly than in those under private control.

Size of Junior Colleges

For the purposes of convenient presentation in this volume, it has seemed advisable to divide junior colleges into four size groups, designated as small, medium, large, and very large. Table II shows the number of institutions of each type and total enrollment in them for 595 institutions for which the data are available.

Table II. Classification of Junior Colleges According to Size, 1941

Group	Number			Enrollment		
	Total	Public	Private	Total	Public	Private
Small (0–99)	177	39	138	11,068	2,679	8,389
Medium (100–499)	328	146	182	79,868	38,671	41,197
Large (500–999)	44	33	11	30,773	21,925	8,848
Very large (1,000 and over)	46	40	6	114,453	104,953	9,500
	595	258	437	236,162	168,228	114,453

The contrast between relative number of institutions of the four size groups and their importance as indicated by their enrollments is shown in Figure 11.

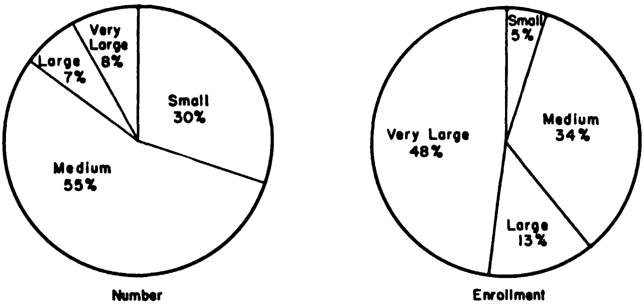


Figure 11. Number of Junior Colleges and Enrollments by Size Groups, 1941

Small institutions with less than 100 students constitute almost one-third of the number of junior colleges in the country, but the enrollment in all of them together is less than one-twentieth of the total enrollment. It is obvious that such small institutions, as a rule, are too small for educational efficiency, particularly if any variety of significant terminal curricula is to be offered. On the other hand, the very large institutions with enrollments exceeding 1,000 students can offer easily a wide choice of terminal curricula. More than half of the very large junior colleges in the country are found in California and it is in these institutions that some of the most significant pioneer work has already been done in the field of terminal education.

That the situation with reference to size has been improving markedly, however, is shown by a comparison of the following figures for average enrollment per institution for two different periods a decade apart.

Year	*Total*	*Public*	*Private*
1929-30	162	240	115
1939-40	397	652	202

The average size of the junior college has more than doubled in 10 years.

Control of Junior Colleges

Two main types of publicly controlled junior colleges are found —those under state control and those under local control.[4] State institutions are usually controlled by state appointed or elected boards of education and supported largely, if not entirely, by state funds. Under local control are included all institutions controlled by locally chosen boards of education or trustees, whether selected on a district, county, municipal, or other local district basis.

The number of state controlled junior colleges is 44, located in 17 states, as shown on the map of Figure 3.

Three types of privately controlled junior colleges are distinguished in this volume, those under denominational auspices, those that are undenominational, nonprofit institutions controlled by boards of trustees, and those that are on a proprietary basis. The number of proprietary institutions cannot be stated with certainty for the non-accredited institutions. For the accredited institutions (upon which most of the data in subsequent chapters of this volume are based) the distinction has been made carefully in *American Junior Colleges.* The total number on a proprietary basis is about 40.

Fifty-six per cent (196) of the privately controlled junior colleges are reported as under denominational auspices, the Baptists leading with 43 institutions; followed by Catholics with 42; Methodists, 38;

---

[4] There are also two junior colleges under Federal control, one in the Canal Zone where the administration of all public education is in charge of the War Department and one WPA institution in Pennsylvania.

Presbyterians, 21; Lutherans, 17; Episcopalians, 6; Seventh-Day Adventists, 5; and 13 other denominational groups with one to four each, 24.

Sex of Students Admitted

The junior college prevailingly is a coeducational institution, over three-quarters (462) of the number being of this type. Four institutions for men are found in the publicly controlled group; all of the others are coeducational. In the privately controlled group, 38 are for men, 106 for women, and 205 coeducational. Location of junior colleges by states, classified on this basis, is exhibited on the maps of Figures 3 and 4.

Racial Basis

Thirty (5 per cent) of the institutions listed in the 1941 directory are exclusively for members of the Negro race; one is for Indians. All except two of the Negro junior colleges are privately controlled.

Other Features

Enrollment by classes. Enrollment by classes for 1939-40 may be summarized as follows:

Class	*Number*	*Percentage*
Freshman	105,663	45
Sophomore	57,128	24
Special	73,371	31
	236,162	100

Faculty employment. The 13,545 faculty members reported in Table I may be classified also on a full-time or a part-time basis. On this basis 8,602 are reported as devoting full-time to junior college work, 4,943 part-time. If it be assumed that two part-time instructors are equivalent to one working full time, there are the equivalent of 11,074 instructors, or an average of 18 full-time instructors per institution.

Type of organization. Following is a summary of the length of course in different types of junior colleges.

Five-year junior colleges	1
Four-year junior colleges	41
Three-year junior colleges	6
Two-year junior colleges	561
One-year junior colleges	1
	610

Summary

These facts present a general view of some aspects of the junior college movement in the United States at the present time. This movement is a heterogeneous one. It has many variations in different sections of the country and in varied types of institutions. It does not try to encroach upon the field of the university above or of the high school below. It has a variety of functions to fulfill in its effort to democratize and popularize college education for the masses between these two educational levels. Not the least important of these functions, the significance of which is only beginning to be generally recognized, is that which, for want of a better expression, has been designated as "terminal" education. The following chapter will be devoted to an outline of the earliest recognition of the important concept of terminal education in the junior college and to the increasing interest in this concept. The "preparatory" or "transfer" function of the junior college, although of great importance, is not considered in this volume.

Chapter II

DEVELOPMENT OF TERMINAL EDUCATION

WHAT IS "TERMINAL EDUCATION"? In some respects, perhaps, the very phrase "terminal education" is a misnomer. It is quite clear that education never should *terminate* from the cradle to the grave. Only when it is time to summon the undertaker is it proper to speak of the *terminus* of education. The phenomenal progress of the adult education movement in recent years is striking evidence that education and life are or should be coterminous.

For two decades or longer, however, *terminal education* and the *terminal function* have had a recognized place in the literature of the junior college movement. "Terminal education" has been used to indicate the completion of formal full-time education in the organized schools—particularly in the junior colleges. Perhaps a better word could have been selected to indicate this concept. "Completion," "culminal," "finishing," and other terms have been suggested and used to some extent by some writers, but none have attained nearly the widespread use in junior college literature of *terminal.* As shown in the following chapter, this term is used widely in statements regarding accreditation of junior colleges.

Sometimes *terminal education* has been used as synonymous with vocational, occupational, or semiprofessional education. This use is unfortunate since it is too narrow, stressing only one phase of education for complete living. It is, of course, highly desirable that a young man or young woman, upon completing his or her formal education, should be prepared to earn a better living as a result of college education. It is equally desirable, however, that he or she also should be prepared to live a better life—personally, as a citizen, and as a member of society—as a result of college education. One phase of *terminal* education should be vocational, or *semiprofessional;* one phase should be *general* or *cultural.* As will be shown in the remainder of this chapter,[1] both phases have been recognized as legitimate and desirable functions of the junior college for many years—ever since the junior college has been known.

---

[1] For a more extended presentation of the desirability of this dual nature of terminal education see the third volume in this series of Terminal Education Monographs to be published shortly, *Why Junior College Terminal Education?* American Association of Junior Colleges, Washington, D.C.

General Recognition of the Terminal Function

President Harper's judgments. President William Rainey Harper, first president of the University of Chicago, is frequently spoken of as the "Father of the Junior College Movement." Under his presidency, the University of Chicago first separated the senior college and the junior college in 1892, and gave the name "junior college" to the latter in 1896—probably the first use of the term. In his notable decennial report made in 1902 after a decade of experience with the new form of organization, President Harper discussed with clear, incisive logic the significance of the new experiment in higher education. He pointed out that two of the five important results of the organization of the separate junior college would be that "many students will find it convenient to give up college work at the end of the sophomore year," and that "many students who would not otherwise do so, will undertake at least two years of college work."[2]

Two years earlier, however, in a significant address before the National Education Association at Charleston, South Carolina, in 1900, President Harper stated six important results which would be accomplished if many weak four-year colleges voluntarily would "come to be known as junior colleges."[3] He stated that such a change would be desirable for at least 200 colleges then existing. Two of the six results, he said, would be that "the student who was not really fitted by nature to take the higher work could stop naturally and honorably at the end of the sophomore year," and that "many students who might not have the courage to enter upon a course of four years' study would be willing to do the two years of work before entering business or the professional school."[4]

Purposes at Fresno. The first statement of semiprofessional objectives to be made by a junior college executive seems to have come from C. L. McLane of Fresno, California. In his circular of May, 1910, prior to the organization of the first public junior college in

---

[2] W. R. Harper, "President's Annual Report, University of Chicago, July 1902," *Decennial Publications of the University of Chicago* (Chicago, 1903), vol. 1, p. xcvi.

[3] This is the first use which has been noted of the term "junior college" to indicate a separate institution. President Harper said: "I use the name 'junior college,' for lack of a better term, to cover the work of the freshman and sophomore years."

[4] W. R. Harper, "The Small College—Its Prospects," *Proceedings of National Education Association* (1900), p. 83. For further discussion of President Harper's influence on the junior college movement, see L. W. Smith, "Founding of Early Junior Colleges—President Harper's Influence," *Junior College Journal* (May 1941), 11:511-21.

California in September of that year, he stated that the new Fresno Junior College intended to emphasize all phases of agriculture, manual and domestic arts, and other technical work.[5]

McDowell's study. The first systematic survey of junior colleges in the United States was made by F. M. McDowell as his doctoral dissertation at the State University of Iowa in 1918.[6] It covers approximately 100 institutions existing in 1917-18. McDowell secured from junior college administrators (21 public, 54 private) statements of the controlling reasons for the organization of their institutions among a suggested list of 11 possible reasons. Both public and private junior college administrators placed as second in importance "to provide a completion school for those who cannot go further." This reason was given by 17 of the public junior college administrators and by 36 of those from private institutions. "To provide vocational training more advanced than high school work" was ranked seventh in importance by both groups of administrators (5 public, 20 private). Thus both the general terminal function and the vocational aspect were judged as distinctly significant even at this pioneer period in junior college history.

Junior college conference at St. Louis. The first junior college conference in the United States was held at St. Louis, Missouri, June 30 and July 1, 1920. It was in charge of Dr. George F. Zook, then specialist in higher education in the United States Office of Education, and resulted in the organization of the American Association of Junior Colleges. Thirty-four educators attended this conference. Twenty-two junior colleges were represented.[7]

An examination of the printed record of the conference reveals numerous references, discussions, and entire papers devoted to the terminal and vocational aspects of the junior college. For example President H. G. Noffsinger said:[8]

> To my mind the most important question before us is the function of the junior college. Is its function to prepare boys and girls for life or to prepare them for the junior year in the A.B. college? I want to know whether I must build courses in the junior college for the 90 per cent

---

[5] C. L. McLane, "The Fresno Junior College," *California Weekly* (July 15, 1910), 2:539-40.

[6] F. M. McDowell, *The Junior College,* U.S. Bureau of Education Bulletin No. 35 (Washington, D.C., 1919), 139 pages.

[7] G. F. Zook, "National Conference of Junior Colleges, 1920," *U. S. Bureau of Education Bulletin No. 19* (Washington, D.C., 1922), pp. 1-47.

[8] Ibid., p. 5.

> or say 75 per cent who are going no further, or for the 25 per cent who are going on to the junior year of the standard four-year college. Shall we take care particularly of those who are going out into life or those who are going on into college?

Similarly President B. W. Loomis questioned:[9]

> I wonder if the junior colleges are going to take over this program of fitting the people to live, or are just preparatory institutions to the four-year colleges and universities; whether we are going to assert our right to "a place in the sun" to serve men and women, fitting them for life at that level, or whether we are just going to be a tail for the universities to wag.

And F. M. McDowell, whose doctoral dissertation at Iowa has been mentioned above, said:[10]

> We should not overlook the demand that the junior college should be a completion or vocational school, furnishing instruction in vocational subjects in advance of anything offered in the high school. . . . The so-called vocational courses of the junior college may well have a dual value: first, to raise the average for the amount of training usually required in the several vocations; and, second, to furnish preparation for advanced work in various fields. . . . I conclude . . . that some vocational courses should be offered, but that these should be of high grade, offering not only vocational training but having general cultural value, as well as acting as stepping stones to something higher.

One of the major addresses was on the topic "Vocationalizing the Junior College"; another was on "Junior Colleges as Completion Schools."[11] The entire report contains ample evidence that this early group of pioneer junior college leaders were acutely conscious of the significance of the terminal function at the first national junior college meeting ever held.

Koos's investigation. Koos made his extensive junior college study under a grant from the Commonwealth Fund in 1921-22.[12] He studied the purposes of junior colleges as stated in 22 published articles, in 56 junior college catalogs, and by parents of 199 junior college students. Among 21 "special purposes" which he lists, "providing occupational training of junior college level" ranks second in frequency in the junior college catalogs and fourth in the published articles. "Completing education of students not going on" ranks fifth in the catalogs and sixth in the published articles.[13] Among the eight reasons in which the replies from parents were grouped, however, not one directly relates to the terminal function.[14] It would appear that recognition of the terminal function, therefore, at this period existed more as aspiration in the minds of administrators than as realization in the experience of students and their parents.

---

[9] Ibid., p. 20

[10] Ibid., pp. 37, 39, 41, 42.

[11] Ibid., pp. 18, 42.

[12] L. V. Koos, *The Junior College,* Research Publications of the University of Minnesota, Education Series No. 5 (Minneapolis, 1924), 2 vols. 682 pages. Summarized in the author's *The Junior College Movement,* Ginn and Co., Boston, 1925, 436 pages.

Four functions of the junior college. Thomas, in his doctoral dissertation at Stanford University in 1926, first set up specific tests to apply to any suggested function "before admitting it as one of the basic criteria by which to judge the development and efficiency of any junior college."[15] By means of these tests, he reached the conclusion that there were four basic junior college functions which he designated as the *preparatory, popularizing, terminal,* and *guidance* functions. This classification has been generally accepted and widely quoted and used in subsequent studies. Thomas states regarding the terminal function: [16]

> Any thoroughgoing attempt to make the junior college serve the higher educational needs of its community inevitably reveals another function which is coming to be recognized as perhaps the peculiar province of this institution. This is the providing of terminal courses, usually vocational in character, so that the student may at the end of two years have "rounded out" his education and be qualified to take up his vocational activities in a competent and well-prepared manner. . . . This aim has played an important part in the development of the junior college movement.

Thomas found that 44 per cent of the members of graduating classes in four California high schools expressed a preference for terminal vocational and semiprofessional junior college courses, while 56 per cent preferred a course preparatory to advanced work in the university.[17]

Campbell's study. Almost a decade after Koos's study, Campbell, in his doctoral dissertation at Peabody College, made a much more extensive analysis of the same type, based upon examination of 349 published articles and 343 junior college catalogs. In his catalog study

---

[13] W. C. Eells, *The Junior College,* Houghton Mifflin Co., Boston, 1931, p. 14.

[14] Ibid., p. 124.

[15] W. M. Proctor, editor, *The Junior College: Its Organization and Administration,* Stanford University Press, Stanford University, California, 1927, p. 11.

[16] Ibid., pp. 18-19.

[17] Ibid. p. 23.

Campbell found that "provision of occupational training" ranked sixth in frequency, and "offering completion education" ranked eighth. In his study of published articles concerning the junior college, "completion of education" ranked second.[18]

Student reasons. The most extensive study of students' reasons for attending junior colleges was made by Brand in 1929 when he secured statements from 3,058 students in 28 California junior colleges. The most frequently given, as well as the most important reason stated, was "to save money," a factor which has some terminal implications; fifth in importance was "to prepare for a vocation" although unfortunately the wording of the blank used was not such as to make it clear whether this always referred to completion of such preparation in the junior college.[19] Students at Phoenix Junior College, Arizona, ranked "to save money" first and "preparation for a vocation" third.[20] Students in eight public junior colleges in Kansas ranked "to save money" first and preparation for one vocation (teaching) fifth.[21]

More than two-thirds of 2,500 prospective junior college students in Alameda, Berkeley, Oakland, and San Francisco expressed a preference for semiprofessional courses over academic and preprofessional courses. Courses in the business field ranked highest, being preferred by almost 30 per cent of the students.[22]

Summary. Thus whether judged by statements in the published literature, statements in junior college catalogs, judgments of junior college administrators, or judgments of junior college students, there has been from the early beginnings of the junior college movement a clear recognition of the significance of the terminal function in both its general and occupational aspects. This recognition is found almost equally among the publicly controlled and the privately controlled institutions—and in all parts of the country.

The recognition of such need is clear. The extent to which this need, clearly realized, has been met actually in practice, however, is quite a different matter. Three types of evidence regarding this matter can be presented: the extent to which terminal courses and curricula have been offered, the extent to which they have been given, and the extent to which they have been taken actually by students. The next three sections of this chapter will be devoted to these three phases of the subject.

---

[18] D. S. Campbell, *A Critical Study of the Stated Purposes of the Junior College,* George Peabody College for Teachers, Contributions to Education No. 70 (Nashville, 1930), p. 30.

[19] W. C. Eells and R. R. Brand, "Student Opinion in Junior Colleges in California," *School Review* (March 1930), 38:176-90.

[20] W. C. Eells, *The Junior College,* Houghton Mifflin Co., Boston, 1931, p. 223.

[21] J. F. Wellemeyer, "The Junior College as Viewed by Its Students," *School Review* (December 1926), 34:762.

[22] W. M. Proctor, "Student Interest in Junior Colleges," *Junior College Journal* (November 1930), 1:87.

Junior College Curricular Offerings

Cultural terminal curricula. Perhaps the oldest privately controlled junior college is Lasell Junior College in Massachusetts, established in 1851 as Lasell Female Seminary. The course of study given in the catalog for 1852 was clearly terminal in character and designed to give the young women completing it a general cultural education. In the catalog for 1874-75 the terminal cultural function is recognized clearly, as shown by the following quotation:[23]

> Our laying aside the name "Collegiate Department" and assuming that of "Seminary Course" for our advanced grade, indicates what we believe to be the true field for such schools as ours. In proportion to those young women who want or need a strictly college course, those who want or ought to have a practical cultural course are 20 to one. Most women need culture—culture more than learning. Or rather, if they must choose, as most must nowadays, let them choose rather the training that helps them to begin to be intelligent, cultured women rather than a large amount of technical studies. Let them know a few things, or a certain amount of many things, well, broadly, thoroughly, as seen on all sides. Let a liking for good intellectual food be implanted which shall bear fruit in long years of growth after school days are over.

This educational doctrine expressed in the last century is still valid for many young women enrolled in junior colleges today. In several of the New England academies which have later developed into junior colleges, the junior college work early consisted of courses of a general cultural character, supplemented by work in music, home economics, art, and sometimes secretarial work.

Vocational and semiprofessional curricula. We are more concerned, however, to note the development of junior college terminal work of the vocational and semiprofessional type.

In one sense we may think of the two-year normal schools as junior colleges engaged in semiprofessional education for the one occupation of teaching. Many normal schools were listed as junior colleges in some of the earlier studies and surveys. Even today, as shown in

---

[23] T. H. Wilson, "The First Four-Year Junior College," *Junior College Journal* (April 1939), 9:365.

Chapter III, preparation of teachers is a major function of junior colleges in a number of states in which two years of education beyond the high school are sufficient to obtain a teaching credential.

At Chaffey Junior College, California, vocational work in at least four lines—music, home economics, commerce, and agriculture—was given as early as 1917.[24] Two or three years later Fullerton Junior College, California, was experimenting with terminal courses in oil refining. Other junior colleges in the state organized other terminal curricula, especially following the passage of the district law of 1921 with its express authorization of courses of a terminal character. Even by 1924, however, Dr. Kemp, of the University of California, in discussing the vocational and community functions of the junior college, stated that California's junior colleges had "done no more than make initial gestures along these lines."[25] Six years later only 16 per cent of the students in California junior colleges were enrolled in vocational curricula.

Prior to 1920 two junior colleges in Texas, John Tarleton and North Texas, were giving vocational work particularly in agriculture.

McDowell's summary. The first summary of curricular offerings in junior colleges was made by McDowell who analyzed the curricula of 19 public junior colleges and 28 private junior colleges for 1917-18. He classified 18 per cent of the total offerings in the public junior colleges and 9 per cent of those in the private junior colleges as vocational in nature. He reports the following frequencies of offerings of vocational subjects in the two types of institutions:[26]

Public Junior Colleges (19)

Mechanical drawing	8
Machine shop	7
Home economics	7
Commerce	6
Surveying	5
Electrical engineering	4
Agriculture	3
Education	3
General engineering	2
Architecture	2
Printing, plumbing, elementary law, journalism, civil engineering, mechanical engineering	1 each

---

[24] M. E. Hill, "Vocationalizing the Junior College," *U.S. Bureau of Education Bulletin No. 19* (Washington, D.C., 1922), pp. 18-21.

[25] W. W. Kemp, "The Junior College Movement in California," *Eighth Yearbook of the National Association of Secondary School Principals,* p. 94.

[26] F. M. McDowell, "The Junior College," *U.S. Bureau of Education Bulletin No. 35* (Washington, D.C., 1919), p. 52.

Private Junior Colleges (28)

Education	17
Home economics	11
Agriculture	4
Journalism	2
Commerce, machine shop	1 each

Other summaries. Other summaries of curricular offerings, as shown in the catalogs of large groups of junior colleges, have been made at different periods by Koos (1921),[27] Hollingsworth and Eells (1930),[28] and Colvert (1937).[29] Colvert's study was of public junior colleges only. While classification of terminal, vocational, or non-academic courses may vary slightly in the different studies, and allowance must be made for the subjective element in classification of courses with varying names, yet the main findings are clear. They are presented conveniently and compactly in a form to facilitate comparisons at the different periods in Table III. The data for public junior colleges, covering a 20-year comparison, are shown graphically in Figure 12.

Table III. PERCENTAGE OF TOTAL CURRICULAR OFFERINGS CLASSIFIED AS TERMINAL OR VOCATIONAL IN JUNIOR COLLEGES, FROM 1919 TO 1940

Investigator	All Junior Colleges		Public Junior Colleges		Private Junior Colleges	
	Number of colleges	Per cent of offerings terminal	Number of colleges	Per cent of offerings terminal	Number of colleges	Per cent of offerings terminal
McDowell (1917)	47	14%	19	18%	28	9%
Koos (1921)	58	29%	23	31%	35	25%
Hollingsworth-Eells (1930)	279	32%	129	33%	150	29%
Colvert (1937)	—	—	195	35%	—	—

These summaries showed a marked increase in percentage of the entire curriculum devoted to terminal courses in the two decades covered by the data. The proportion of the offerings in these fields has more than doubled in the past 20 years. At the present time probably about one-third of all the curricular offerings in the junior colleges of the country are in the non-academic or terminal fields. Doubtless this situation is far short of the ideal, but it shows a steady and healthy growth in the right direction.[30]

---

[27] L. V. Koos, *The Junior College Movement,* Ginn & Co., Boston, 1925, p. 33.

[28] W. C. Eells, *The Junior College,* Houghton Mifflin Co., Boston, 1931, p. 489.

[29] C. C. Colvert, *The Public Junior College Curriculum,* Louisiana State University Press, 1939, p. 140.

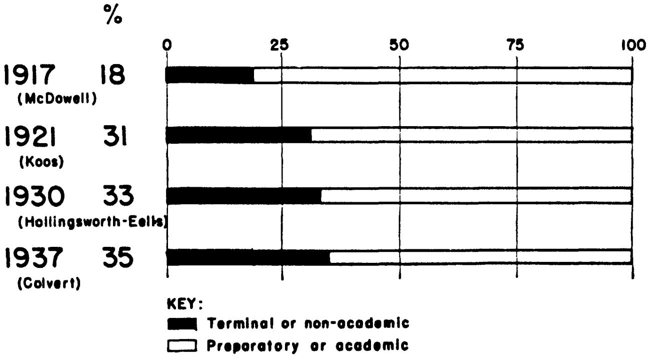


Figure 12. Proportion of Total Offerings, Terminal in Character, in Public Junior Colleges, 1917 to 1937

One limitation on the data of Table III is that the same institutions are not included in the different studies. This limitation is removed in a study by Hiatt who found that in the 10-year period from 1920 to 1930 in the same 19 junior colleges curricular offerings in art, music, home economics, drawing, engineering, physical education, and agriculture increased in each case more than 100 per cent; in business education the increase was almost 50 per cent.[31]

Junior College Curricular "Givings"

The preceding section has summarized significant facts concerning curricular offerings as shown by an analysis of the college catalogs. To what extent were these offered courses actually given? Little evidence has been gathered to compare "offerings" with "givings." Koos, 20 years ago, as a result of visits to 14 junior colleges, found that the average reduction from courses offered in catalogs to those actually given was 10 per cent in public junior colleges; 5 per cent in private junior colleges. In Texas, 10 years ago, in 16 public junior colleges the shrinkage was 12 per cent. In 20 private junior colleges in the same state the shrinkage was the same. With increase in size and stability of junior colleges in the past two decades the differences between "offerings" and "givings" are probably less now than when these earlier data were obtained. The difference between courses offered and courses actually given, therefore, is not particularly significant.

---

[30] For evidence concerning need for additional terminal offerings see the third monograph of this series, *Why Junior College Terminal Education?* to be published in the near future.

[31] L. R. Hiatt, "Curricular Changes in Junior Colleges," *Junior College Journal* (October 1930), 1:6-11.

Junior College Curricular "Takings"

National studies. No data have ever been assembled on a nationwide basis concerning actual enrollments in junior college terminal curricula until the collection of material based upon enrollments for the academic year 1938-39 for *American Junior Colleges.* This information is summarized and presented in later chapters of this monograph, particularly in Chapters V and VI, and in the appendix. These data as summarized in Figure 13 show that 34 per cent of the 121,573 regular students reported as attending 426 junior colleges in all parts of the country were classified as students in terminal curricula. In 204 publicly controlled institutions the percentage was 35; in 222 under private auspices it was 33. Further details will be found in the tables presented in Chapter V.

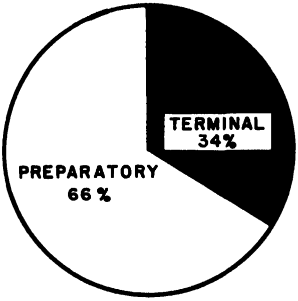


Figure 13. PROPORTION OF 121,573 STUDENTS IN 426 JUNIOR COLLEGES ENROLLED IN TERMINAL CURRICULA, 1940

The nearest approach to a comparable national study of earlier date to show trends was one made in 1931, in which data were collected concerning almost 15,000 students in 61 publicly controlled junior colleges from all parts of the country. At that time 20 per cent were enrolled in terminal curricula.[32] If this may be considered a representative sample it means that the proportion of students taking advantage of terminal offerings has almost doubled in less than a decade.

State studies. Some data are available for publicly controlled junior colleges in California and Texas. In 1929 in 19 public junior colleges in California, 20 per cent of some 44,000 registrations were in the non-academic fields.[33] In Texas the same year 23 per cent of 11,000 registrations in 16 municipal junior colleges were in the non-academic fields.[34]

---

[32] A. Christensen, "The Student Body in Public Junior Colleges," *Junior College Journal* (October 1932), 3:13-16.

[33] L. V. Koos and F. J. Weersing, *Secondary Education in California: A Preliminary Survey,* State Department of Education, Sacramento, California, 1929, p. 91.

Two years later the Carnegie Foundation found that about 30 per cent of almost 90,000 registrations in 32 California public junior colleges were in the non-academic fields.[35]

The latest and most comprehensive study of enrollments in California was made by Lindsay in 1939. In a careful analysis of more than 30,000 students in 35 public junior colleges, he found that 46 per cent were enrolled in semiprofessional curricula.[36] Further details of his study are shown in Figure 14.

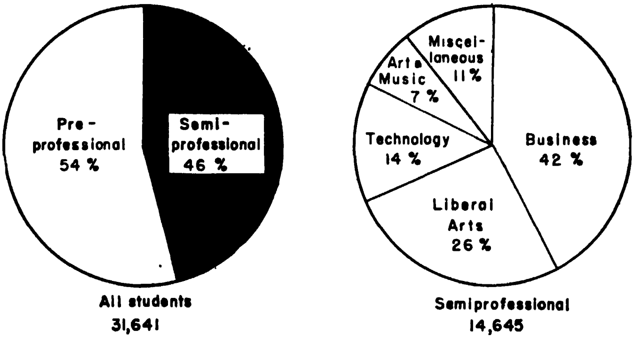


Figure 14. ANALYSIS OF CURRICULAR ENROLLMENT IN CALIFORNIA PUBLIC JUNIOR COLLEGES, 1939

Increase in Publications

Increasing interest in the field of terminal education may be measured in part by the increasing number of publications with reference to the subject in the literature. The following summary shows the number of items in the recent bibliography, *The Literature of Junior College Terminal Education*[37] which were published each year since 1900.

---

[34] J. R. Reid, *Texas Municipal Junior Colleges*, State Department of Education Bulletin (Austin, Texas, 1929), pp. 71-72.

[35] H. Suzzallo and others, *State Higher Education in California*, State Printing Office, Sacramento, California, 1932, p. 73. Note that data in this and the two preceding references refer to registrations, not to students. Probably each student was registered on the average in four or five courses.

[36] F. B. Lindsay, "Enrollments in Various Curriculums of California Public Junior Colleges," *California Schools* (December 1939), 10:303-08.

[37] L. E. Engleman and W. C. Eells, *The Literature of Junior College Terminal Education*, American Association of Junior Colleges, Washington, D.C., 1941, 336 pages.

1900	1	1920	7	1931	104
1904	1	1921	7	1932	111
1906	1	1922	12	1933	101
1908	1	1923	13	1934	78
1910	1	1924	4	1935	91
1913	1	1925	12	1936	100
1915	4	1926	18	1937	106
1916	9	1927	27	1938	125
1917	3	1928	50	1939	141
1918	5	1929	56	1940	252
1919	5	1930	63		
					1,510

It will be noted that publications in this field were very few and scattered prior to 1915. The stream did not get well under way until 1925. Since that date there has been an almost constantly increasing number. Almost half of the titles have appeared in the past five years.

Chapter III

LEGAL STATUS OF TERMINAL EDUCATION

IN THIS CHAPTER the legal status of Federal aid for vocational education is considered, followed by brief statements regarding provision for various types of terminal education in the states in which such provision has been made.

Federal Authorization[1]

The program of vocational education in the United States has developed as a cooperative enterprise between the states and the Federal government. Authorization for the use of Federal funds in public school systems in the different states is contained primarily in two Acts of Congress commonly known as the Smith-Hughes and George-Deen Acts. The former, often referred to as the "organic act," was enacted in 1917; the latter, in 1936. Under these and related acts, upward of $175,000,000 has been expended by the government in the past quarter of a century for the improvement of education in agriculture, trades and industries, home economics, and the distributive occupations. In recent years substantial sums have been allotted to junior colleges to aid work in these four fields. For the fiscal year ended June, 1940, total allotments were in excess of $21,000,000. The appropriations authorized by the two acts are, in general, subject to the same conditions and limitations which are stated in detail in the earlier act. Pertinent extracts from both acts are given in the appendix, pp. 244-46.

---

[1] This section of Chapter III is based almost entirely upon *Statement of Policies for the Administration of Vocational Education* (Vocational Education Bulletin No. 1, Revised February 1937), U.S. Office of Education, Washington, D.C., 137 pages. This bulletin should be secured by anyone interested in pursuing this subject further, It contains the texts of the various vocational education laws, instructions for their application, and administrative decisions and interpretations which have been built up over a number of years and revised with the aid of numerous educators participating in a series of conferences called to consider desirable revision. This publication is now out of print but it can be found in many libraries. Preparation of a revised edition is planned.

The reader interested in this phase of the matter is referred also to the mimeographed report, *Conference of the Representatives of Kansas Junior Colleges and Kansas State Board for Vocational Education,* State Department of Education, Topeka, Kansas, 1940, 91 pages. This conference was held at Topeka, April 26, 1940, with Frank Cushman, Consultant in Vocational Education of the United States Office of Education, as conference leader.

This section has been read and approved by responsible officers of the Vocational Education Division of the United States Office of Education.

The provisions of the organic Smith-Hughes Act and of the supplementary George-Deen Act are permanent, continuing, and similar to one another in most respects. In providing for funds, however, there is an outstanding dissimilarity in the acts. The former actually appropriates Federal funds for vocational education on a permanent, continuing basis, while the latter merely provides permanent authorization for appropriations for vocational education.

The administration of these acts is the responsibility of the United States Commissioner of Education acting through the Vocational Division of the United States Office of Education as an administrative agency. This agency acts in cooperation with state boards of vocational education, which in turn set up the conditions and regulations for use of funds in the schools of the different states, subject to the Federal acts, and submit these plans for approval to the Office of Education. Changing legislative and administrative provisions of the past point to the various attempts made to keep vocational education in step with current social and economic developments. As vocational education continues to expand and change to meet new needs, the Office of Education endeavors to change its policies and administrative interpretations when experience may indicate the desirability or the necessity of change.

The vocational education acts provide for a plan of cooperation between the Federal government and the states for the promotion of vocational education in the fields of agriculture, trades and industry, home economics, and commerce (distributive occupations). This cooperation of the states with the Federal government is based upon four fundamental ideas: (1) That since vocational education is essential to the national welfare, it is a function of the national government to stimulate the states to develop and maintain this service; (2) that Federal funds are required to adjust equitably among the states the burden of providing this service; (3) that since the Federal government is interested vitally in the success of vocational education, it should, so to speak, secure a degree of participation in this work; and (4) that only by creating such a relationship between the central and the local governments can better and more uniform standards of educational efficiency be set up.

To the extent that it is subsidized by the Federal government, vocational education has reference to training for useful employment. It may be given to boys and girls who, having selected a vocation, desire preparation for entering it as trained workers; to youths who, having already entered employment, seek greater efficiency in that employment; and to adult workers, established in their trade or occupation, who wish through increase in their efficiency and wage-earning capacity to advance to positions of greater responsibility.

Applicability to the junior college. Probably Congress originally did not contemplate the application of the Smith-Hughes Act to junior colleges. Its widest application, of course, has been in the high schools. As a matter of fact, the public junior college movement was only in its infancy when the act was passed in 1917. Today, however, many junior colleges are receiving Federal funds for vocational work carried out under the provisions of the vocational education acts and the Office of Education's interpretations of these acts.

In order to obtain funds for salaries of teachers, supervisors, or directors in the four specified vocational fields, the Office of Education requires that the state boards shall stipulate in their state plans submitted to the Office of Education the following features:

1. Qualifications of supervisors and directors
2. Plans for the training of teachers
3. Plans for supervision
4. That the work shall be carried on in schools under public control
5. That the controlling purpose of the education is to fit for useful employment
6. That the education shall be less than college grade
7. That the education is designed to meet the needs of persons over 14 years of age, who have entered upon or are preparing to enter upon work of the farm, trade or industry, homemaking, or distributive occupations
8. That the state or local community, or both, shall provide the necessary plant and equipment

The crux of the matter, from the junior college standpoint, is the sixth stipulation above. The junior college can meet easily all the others. What is meant by education of "less than college grade"? It does not mean that the *institution* must be of less than college grade—only that the particular *work offered,* for which Federal aid is received, must be of less than college grade. As a matter of fact, Smith-Hughes money is allotted to four-year degree-granting colleges as well as to high schools.

The Office of Education has set up five qualifications to be met if a program of trade and industrial education is of "less than college grade."

1. College entrance requirements are not made prerequisites for admission
2. The objective of the training program is to prepare for advantageous employment in industry
3. The training program does not lead to a degree
4. The program is not required to conform to conditions governing a regular college course
5. The instructors meet all the provisions of the state plans as to qualifications

The first qualification does not mean that students who are high school graduates cannot take such courses—only that such condition must not be made a prerequisite for all students entering the course.

A more general adaptation of these five qualifications has been made by the Office of Education to make them apply to other fields as well as to that of trades and industries. According to latest available information, no less than 62 junior colleges in 14 states are now receiving Federal grants under the provisions of the vocational education acts. These are distributed as follows:[2]

Agriculture: 15 junior colleges in 8 states
Trades and industries: 36 junior colleges in 8 states
Home economics: 18 junior colleges in 8 states
Distributive occupations: 18 junior colleges in 5 states
Teacher training: 9 junior colleges in 7 states

Some of these institutions are located in states where the junior college has been defined by law as part of the secondary education system of the state; others, where just as definitely it has been recognized legally as part of the higher educational system of the state. Federal recognition, therefore, appears to be independent of type of state classification of the junior college.

General and vocational education. It is of interest, too, that the text of the organic act, as well as the administration of it, recognizes the significance and desirability of both phases of terminal education as defined in Chapter VI—general or cultural training as well as that of a strictly vocational type, although financial assistance is limited to the latter type.

The organic act requires a specified time to be devoted to practical vocational work. In addition, time sufficient for proper teaching must be given to instruction in related or technical subjects which are also vocational. The remaining time is to be given to work "necessary to build a well-rounded course of training." In its interpretation of this phrase, the Office of Education says:[3]

---

[2] For names of these institutions, and fields in which they have cooperative programs, see the appendix, pp. 247-48.

> The Office of Education desires to emphasize its belief that all vocational curriculums should be an integration of manipulative, technical, related vocational, and other subjects so as to provide: (1) A complete plan of instruction which will insure not only initial employment assets but which will enable the work to keep pace with changing conditions and eventually advance in the occupation; and (2) for all aspects of the life adjustments required of self-directed citizens in our modern state of society.
>
> While it is recognized that under the provisions of the organic act Federal funds may not be used as reimbursement for any part of the cost of providing instruction in purely nonvocational subjects, the Office of Education believes that those in charge of vocational education should make effort to secure the active cooperation of those in charge of general education, with a view to rounding out the vocational courses with properly integrated nonvocational instruction.
>
> The Office of Education further wishes to point out, to those in charge of vocational education, the possibilities of expanding the scope and enriching the whole field of related subjects. Related subjects in the vocational program should include mathematics, science, economics, history, safety practices, hygiene, law, civics, and similar fields so organized and presented as to be directly related to the occupational needs and interests of the pupils. These related courses should be as varied and as broad as the needs of the students in preparing for all aspects of life adjustments which are influenced by the vocational relations of the worker.

State Authorization

For the most part, laws in the different states authorizing the establishment of public junior colleges do not deal with the functions or curricula of these institutions. They specify that the work offered shall be of college grade or in advance of the high school, but wisely leave determination of detailed regulations to administrative authorities such as state, district, or local boards of education. In at least a half dozen states, however, there is some recognition of the terminal function in the acts authorizing the establishment of public junior colleges.

California. In the district law of 1921 in California, both preparatory and terminal functions are clearly recognized, as the following extract shows:

---

[3] *Statement of Policies for the Administration of Vocational Education* (Vocational Education Bulletin No. 1, Revised February 1937), U.S. Office of Education, Washington, D.C., pp. 34-35.

> Junior colleges may provide courses of instruction designed to prepare for higher institutions of learning; courses of instruction designed to prepare persons for agricultural, industrial, commercial, homemaking and other vocations; and such courses of instruction as may be deemed necessary to provide for the civic and liberal education of the citizens of the community.

Colorado. The junior college enabling act, passed in 1937, defines a junior college as an

> educational institution which shall provide not to exceed two years of training in the arts, sciences, and humanities beyond the twelfth grade of the high school curriculum and for vocational education.

Connecticut. The Connecticut statute says:

> A junior college should aim to meet the needs of the community in which it is located, including preparation for higher institutions of learning, liberal arts education for those who are going no further than the two-year college course, vocational training for particular occupations usually called semiprofessional occupations, and, where possible, short courses for adults as their interests and needs may determine.

Mississippi. The Mississippi school code requires that the junior college curriculum include agriculture, home economics, commerce, and mechanical arts, and recommends, where possible, teacher training, music, and public speaking.

Nebraska. The Nebraska law of 1931 follows closely the phrasing of the California law. Junior colleges are authorized:

> To provide courses of instruction designed to prepare for higher institutions of learning; courses of instruction designed to prepare agricultural and industrial, commercial, homemaking and other vocations; and such courses of instruction as may be deemed necessary to provide for the civic and liberal education of the citizens of the community.

New Hampshire. Regarding curricular offerings of the junior college, the New Hampshire law says:

> It may offer curricula in such vocations as will meet the needs of students, and there must be at least one curriculum whose completion permits transfer without time loss to a recognized degree-granting college.

Pennsylvania. In Pennsylvania the law states that a junior college may provide curricula to give: (a) broad academic training for those not planning to continue their education; (b) definite preparation for various types of senior colleges; (c) definite vocational training on a semitechnical level.

Teaching Credentials

In addition to the specific legal provisions quoted above, more than half of the states authorize the granting of some type of teaching certificate or credential on the basis of two years or less of college work.[4] In practically all such states junior college graduates who have taken the required professional education can secure such certification. Provisions vary and are not presented here in detail. Following are the states in which junior colleges are located which permit certification on the completion of two years or less of college work: Arkansas, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin.

A recent study by the United States Office of Education of conditions for certification in 30 states shows that 135 junior colleges in these states are approved by the state for teacher certification purposes.[5] This study does not include the states of Arkansas, Florida, Georgia, Maine, Mississippi, Missouri, New Mexico, South Carolina, South Dakota, Tennessee, and Vermont of the list given in the preceding paragraph. In these eleven states are found 120 junior colleges. Probably the majority of these junior colleges are also approved for teacher certification purposes.

---

[4] B. W. Frazier, "Minimum Certification Requirements for Teachers," *School Life,* U.S. Office of Education, Washington, D.C. (October 1940), 26:27-29. See also the third monograph in this series, *Why Junior College Terminal Education?* Fig. 29, Chap. III.

[5] F. J. Kelly and others, *Collegiate Accreditation by Agencies Within States,* U.S. Office of Education Bulletin No. 3 (Washington, D.C., 1940), p. 151.

Chapter IV

RECOGNITION OF TERMINAL EDUCATION BY ACCREDITING AGENCIES

POWERFUL FACTORS in the development of the junior college have been the standards set up by various accrediting agencies —national, regional, and state. Accreditation has had its faults, of course, and too many educational crimes or near-crimes have been committed in its name. Accreditation also has had its virtues, particularly as a potent stimulus to improvement of new or weak institutions. It is not the purpose here to discuss accreditation in general, but only to point out the recognition of terminal education in the standards as they have been developed by different accrediting agencies.[1]

Accrediting Agencies

The five regional associations of colleges and secondary schools—New England, Middle States, North Central, Southern, and Northwest—cover all the 48 states with the exception of California. Junior college standards for accreditation were adopted first by the North Central Association in 1917. The last of the five to adopt such standards was the New England Association in 1929.[2]

Two national agencies, the American Council on Education and the American Association of Junior Colleges, have also adopted standards which have been quite influential, but both sets have now been abandoned since neither agency has served primarily as an accrediting organization. The standards of these two organizations, therefore, have been of an advisory character only.

In 1924 the American Council on Education adopted junior college standards. These were the basis for those later adopted by the Northwest Association, by the Middle States Association, and by several of the state agencies. The American Association of Junior Colleges at its second meeting in 1922 adopted tentative standards which were revised in 1925, 1929, and 1931. These were important in defining the essential characteristics of a satisfactory junior college, as seen by junior college leaders themselves, and were significant in influencing the content of standards as adopted and revised from time to time by other agencies. The Association for a time acted as an accrediting agency to a limited extent in regions in which other agencies were not functioning, but with the wider development of accreditation procedures this type of activity, which had never been stressed, became unnecessary. Since it was judged that the standards had served their purpose, the Association, rather than continuing their revision, voted in 1940 to rescind them.

---

[1] For a full discussion of junior college accrediting standards, their faults, their advantages, and their characteristics, see W. C. Eells, *American Junior Colleges*, American Council on Education, Washington, D.C., 1940, Chap. IV. For a statement of the standards actually adopted by various accrediting agencies see the same volume, Chap. V. See also *Collegiate Accreditation by Agencies Within States*, U. S. Office of Education Bulletin No. 3 (Washington, D.C., 1940), 219 pages.

[2] The New England Association does not "accredit" institutions, but its standards for membership are considered as equivalent to accreditation in the other regional areas.

Two other national agencies organized on a denominational basis approve or accredit a limited number of institutions—Catholic University of America and the University Senate of the Methodist Church.

In the individual states a wide variety of accrediting agencies and procedures is found. Most frequently junior college accreditation is a function of the state department of education, often of the state university, occasionally of special organizations or committees.[3]

Recognition of terminal aspects in the past. The influential standards of the American Council on Education contained no reference, even by implication, to terminal education—they were written entirely in terms of the university preparatory or transfer function of the junior college.

The standards of the American Association of Junior Colleges as revised in 1925 included a definition which at least recognized the terminal function—but only in the sense of prophecy or aspiration. This definition was as follows:

> The junior college is an institution offering two years of instruction of strictly collegiate grade. This curriculum may include those courses usually offered in the first two years of the four-year college; in which case these courses must be identical, in scope and thoroughness, with corresponding courses of the standard four-year college. The junior college may, and is likely to, develop a different type of curriculum suited to the larger and ever-changing civic, social, religious, and vocational needs of the entire community in which the college is located. It is understood that in this case also the work offered shall be on a level appropriate for high school graduates.

The first use of the word "terminal" in the Association's standards occurs in the statement regarding entrance requirements in the 1929 revision:

---

[3] For a summary of practices in the different states, see *American Junior Colleges*, p. 41.

> For entrance to the two-year junior college 15 standard units are required. . . . For entrance to terminal courses the criterion shall be the capacity of the individual to profit by the instruction offered.

An examination of the standards of two national agencies, of two regional agencies, and of nine state agencies as printed in 1926[4] reveals no standards, except those of the American Association of Junior Colleges quoted above, which recognize terminal education in any of its aspects. At that time even this aspirational type of recognition represented frontier thinking. The reference to terminal education which could not be included in 1925 was adopted only indirectly after some discussion and lobbying in the 1929 meeting. Many junior college leaders at that meeting were not in favor of it.

Four years later in 1930 the number of statements of formal standards for accrediting junior colleges as published by the United States Office of Education[5] had almost doubled (2 national, 4 regional, and 16 state). Yet only one of these (Kansas), aside from that of the American Association of Junior Colleges, refers directly to the terminal function of the junior college. The Kansas statement includes the following: "A junior college may offer completion courses in such vocations as will meet the needs of the local community."[6]

None of the four regional associations (Middle States, North Central, Southern, Northwestern), which had adopted junior college standards by 1930, gave any recognition to the terminal function.

It is interesting to note, however, that the standards of one of the national denominational agencies, the University Senate of the Methodist Church, as revised in 1925, did give such recognition in the statement:[7]

> The junior college is an institution of higher education which gives two years of work equivalent in prerequisites, scope, and thoroughness

---

[4] E. B. Ratcliffe, *Accredited Higher Institutions,* U.S. Bureau of Education Bulletin No. 10 (Washington, D.C., 1926), 105 pages.

[5] E. B. Ratcliffe, *Accredited Higher Institutions, 1929-1930,* U. S. Office of Education Bulletin No. 19 (Washington, D.C., 1930), 156 pages.

[6] Indirect suggestions of recognition are found also in the statements of Illinois with reference to qualifications of instructors in other than academic departments, and in those of Missouri suggesting the degrees of associate in fine arts and associate in education as appropriate for curricula other than those in the academic fields.

[7] These standards are not printed in either the 1926 or 1930 editions of the U.S. Office of Education's *Accredited Higher Institutions.* They have been furnished by President John L. Seaton of Albion College, chairman of the University Senate of the Methodist Church.

to the work done in the first two years of a standard four-year college. The junior college may include also and is likely to develop a different type of curriculum suited to the larger and ever-changing civic, social, and vocational needs of the community in which it is located.

Recognition of the terminal educational aspects of the junior college on the part of accrediting agencies, even if still inadequate, is a product almost entirely of the past 15 years, very largely of the past 10 years.

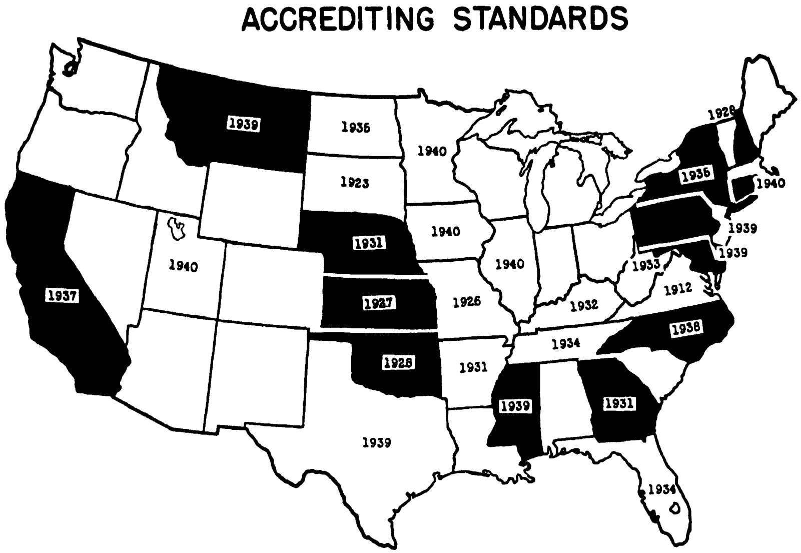


Figure 15. States in Which Accreditation Standards Recognize the Terminal Function of the Junior College

Dates indicate year of latest revision of junior college standards. States in black have formal standards which recognize the terminal function. States with dates but not in black have junior college formal standards but with no recognition of the terminal function. States without dates have adopted no formal junior college standards.

Present recognition of terminal aspects. At the present time (1941) all of the five regional accrediting agencies and the two national denominational agencies recognize terminal education as a legitimate function of the junior college in their statements of standards for accrediting these institutions. Such recognition is found also in the standards of 13 of the 28 states in which a state agency has adopted a formal set of standards. These states, with the dates of adoption or latest revision of their present standards, are shown in black on the map of Figure 15. The states thus recognizing terminal education are scattered from New England to the Pacific Coast, from the Canadian border to the Gulf of Mexico.

Terminology used. The terminology used in referring to work of a terminal character is varied, but the word "terminal" is found most frequently in 13 of the 20 sets of standards—in six of the seven sets of standards of regional and national agencies, in seven of the 13 sets of state standards. Both the general and vocational aspects of terminal education are recognized rather frequently. Following is a summary of the terms or phrases found in the various statements, together with frequency of their use by the different agencies.

Terminal type:	Terminal	13	
	Completion	1	
	Finishing	1	
		—	15
Vocational type:	Vocational	7	
	Semiprofessional	4	
	Semitechnical	1	
		—	12
General type:	General	5	
	Cultural	1	
	Social	1	
	Civic	1	
	Community service	1	
		—	9
Miscellaneous type:	Meeting individual needs	2	
	Courses not now typically paralleled in standard colleges	2	
	Popularizing	1	
		—	5

Not only the concept but also the word "terminal" was virtually unknown in standards in existence only 15 years ago. Today this is the most common term found to express the general concept in the statements of accrediting agencies.

Topics considered. Consideration of terminal education, however, is far from adequate in most of the standards now in existence. Pertinent extracts from the statements of the 20 agencies are given later in this chapter. A study of them will show that in all except five agencies (New England Association, Southern Association, Georgia, Maryland, Montana) mention of terminal education is limited to a relatively brief and often rather vague or indirect reference to the curriculum. Most of them stress the academic or preparatory aspect although permitting the terminal to be included as a secondary consideration. They indicate that a reputable junior college *may* have terminal curricula but *must* have those equivalent to the first two years of regular four-year college or university courses. A few place the two aspects on the same permissive basis. Only the Nebraska standards state positively that the curricula *should* recognize both preparatory and terminal functions.

Maryland is the only state in which more specific requirements for the content of terminal curricula are set up. One specific requirement, for example, states that each such curriculum must include at least two-fifths of its content from the general or cultural subjects. Two agencies (Georgia, Maryland) consider explicitly conditions of entrance to terminal curricula. Only one (Maryland) includes graduation requirements. One (New England Association) provides for evidence of the success of graduates of terminal curricula. One (Southern Association) specifies suitable laboratory equipment for vocational and semiprofessional courses. One (Montana) treats the qualifications of instructors in vocational subjects.

The present recognition of terminal education in formal accreditation standards is far from complete or satisfactory. In comparison with the situation 15 years ago, however, or even 10 years ago, the present conditions are a marked improvement and represent real progress. Crystallization of policy in such formal statements of accrediting agencies, of course, tends to lag behind progressive thought in the educational world. A considerable degree of unanimity of thought is a prerequisite to formulation and adoption of standards.

Extracts from Standards of Accrediting Agencies

In the remainder of this chapter are given extracts from the latest revised junior college standards of regional, national, and state accrediting agencies which indicate any recognition of junior college terminal education. Dates of latest reported revisions also are given. The complete standards of each agency, except those of the New England Association, may be found in Chapter V of *American Junior Colleges,* from which the following extracts, with the single exception noted, have been taken.

UNIVERSITY SENATE OF THE METHODIST CHURCH

1940

The junior college is an institution of higher education which gives two years of work comparable in prerequisites, scope, and thoroughness with the work done in the first two years of a standard four-year college. It may include also a different type of curriculum suited to the larger and ever-changing civic, social, and vocational needs of the community in which it is located. The major part of this second curriculum is likely to consist of courses terminal in character.

CATHOLIC UNIVERSITY OF AMERICA

1936

The curriculum of a junior college or of a teacher training institution should consist of definitely integrated courses which in content, scope, and thoroughness would be acceptable as the first two years of a standard four-year college. The curriculum may be terminal, prevocational, and college introductory.

NEW ENGLAND ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS[8]

1940

The junior college shall offer at least two years of instruction beyond the secondary school level, and although it may offer curricula of a general, cultural nature, adequate to the needs of students who do not intend to continue their formal education beyond the two years of college, it must offer one or more curricula to fulfill adequately one or more of the following functions:

A. Transfer function. To prepare students for advanced standing in other colleges or universities of recognized standing.

B. Preprofessional function. To prepare students for entrance to professional schools of recognized standing which require for admission one or two years of college work.

C. Exploratory function. To offer a concentration and continuity of courses in one or more curricula to give the student an opportunity to explore his interests and abilities in the field of creative arts or in other fields, so that he may plan intelligently for the continuation of his educational program.

D. Terminal function. To prepare students to enter the vocations or the semiprofessions which require more education than can be provided on the secondary school level but which do not require four years of education on the college level.

Junior colleges performing the first three of the above functions should offer instruction in at least the five fields of English, mathematics, foreign languages, social sciences, and natural sciences. Junior colleges performing the terminal function in a highly specialized field should require in each curriculum, besides technical preparation, an adequate general, cultural background, consisting of courses in the fields of English and social science and, in certain curricula, natural science.

---

[8] M. D. Proctor, "New England Standards," *Junior College Journal* (March 1941), 11: 397-99.

The junior college which undertakes the first three of the abovementioned functions should be able to present evidence that its work has been recognized by colleges, universities, and professional schools of approved standing. It should also be able to present evidence that its terminal curricula have prepared students adequately for the vocations and semiprofessions.

Middle States Association of Colleges and Secondary Schools

1938

It is always to be understood that in appraising an institution which seeks its approval, the commission seeks to avoid obliging colleges to conform to any fixed pattern. The purpose of the commission is not to standardize but to give its approval to institutions which justify their presence in the higher educational field and which reasonably accomplish the purposes they set for themselves. Indeed, adherence to conventional policy and procedure, while in no sense objectionable and often desirable, is not essential. The commission wishes to encourage intelligent experimentation and pioneering in both administration and teaching. The real test turns upon the intellectual and scholastic honesty of the individual enterprise, its right to claim recognition in the college world, and the proof it affords of the success of its endeavors through the students it trains and graduates.

The two-year course on the upper level may be devoted solely to work in liberal arts and science, or to such work coupled with curricula in semiprofessional and vocational fields, terminal in character, or may be devoted entirely to such terminal courses.

North Central Association of Colleges and Secondary Schools

1937

An approved institution is not barred from offering curriculums terminating at the end of one, two, or three years if they are taught at the level of collegiate instruction. The curriculum should presuppose the completion of a secondary school curriculum as a condition for entrance to the institution, or secondary courses should be so integrated with the curriculum of the institution itself as to guarantee the educational progress of students to a definite stage of advancement beyond the completion of the usual secondary school offering.

An institution should provide appropriate facilities for general education unless, as may be the case in a particular institution, its program presupposes the completion of an adequate program of general education at the collegiate level prior to entrance.

SOUTHERN ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS

1940

The last two years are to be equivalent in prerequisites and thoroughness to the work offered in the first two years of standard two-year junior colleges. The program of the last two years may be so organized as to be preparatory to the last two years of senior liberal arts, professional, or fine arts colleges, or it may be general, semiprofessional, or terminal.

The laboratories shall be equipped for individual instruction for each laboratory course offered in science, as well as for all vocational and semiprofessional courses.

NORTHWEST ASSOCIATION OF SECONDARY AND HIGHER SCHOOLS

1936

In defining standards for the junior college the committee had in mind an institution covering the first two years of college work. At the same time it is not unmindful of the fact that rarely is the junior college confined to this form of organization; usually these two years of college work are united with two or more of high school work or with other collateral courses for teachers. Nor does it desire to ignore the possibility that junior colleges may offer also courses and curricula of college grade not now typically paralleled in the first two years of work in standard colleges and universities. For the present, however, the committee has not attempted to define more nearly these varying types, but has suggested as standards certain requirements pertaining largely, if not exclusively, to these two college years, believing these years to be the essential part of the work. The existence of these two years alone justifies the term "junior college."

CALIFORNIA

STATE DEPARTMENT OF EDUCATION

1937

In each junior college there shall be established and maintained a program of study which shall include:

a. Such two-year curricula providing secondary education beyond the level of the high school as may be necessary to meet the educational needs and objectives of the individual junior college students enrolled; and

b. Such additional courses of study as may be necessary to meet the needs of the students enrolled.

CONNECTICUT

STATE DEPARTMENT OF EDUCATION

1940

The junior college is an institution offering two years of post-secondary school education. It may offer only one curriculum, transfer or terminal, or both transfer and terminal curricula.

GEORGIA

STATE DEPARTMENT OF EDUCATION

1931

For entrance to terminal or finishing courses in the two-year junior college or the upper division of the four-year junior college, the equivalent of 15 units should be required. This equivalent may be demonstrated by entrance examinations, ability tests, or by the proven ability of the student to profit by the instruction offered.

KANSAS

STATE DEPARTMENT OF EDUCATION

1927

A junior college is an institution of higher education with a curriculum covering two years of work equivalent in prerequisites, methods, aims, and thoroughness to that done in the first two years of accredited four-year colleges. Subject to this requirement, a junior college may offer completion courses in such vocations as will meet the needs of the local community.

MARYLAND

STATE DEPARTMENT OF EDUCATION

1939

In preparing these standards, the state department has no desire to encourage or insure uniformity among the junior colleges of the state. The department wishes each institution to feel free to develop itself in any way consistent with sound educational practices and will encourage any institution to that end. The state department is primarily concerned with the "intellectual and scholastic honesty of the individual enterprise," its financial ability to carry out the purposes it has set for itself, and the fidelity with which the administration and instructional staff perform their functions.

The junior college may be organized as a two-year post-high school institution or as a four-year institution which includes the last two years of high school and two years of post-high school work; it may be independent of other administrative units, may be associated with a recognized secondary school, or may be a unit within a recognized college or university; it may offer only one curriculum, transfer or terminal, or both transfer and terminal curricula; and its terminal curricula may be cultural only, semiprofessional only, or both cultural and semiprofessional.

Admission to terminal curricula may be extended to all graduates of secondary schools who have already given evidence that they are both able and willing to pursue, with credit to the institution and with benefit to themselves, the curricula for which they apply. A few students, not candidates for the junior college diploma, may be admitted to individual terminal courses as special students, even though they do not hold secondary school diplomas.

Because junior college graduates are expected to have a broader general education than do those whose formal education ends with graduation from high school, each terminal curriculum must include not less than 24 semester hours of required "general education" courses. Because students entering the semiprofessions are expected to be proficient in the skills, techniques, and knowledges required for the successful pursuit of their chosen lifework, each semiprofessional curriculum must include not less than 24 semester hours of required courses suitable to the special vocation for which preparation is offered.

For graduation and the title of associate of arts, the institution must require the satisfactory completion of not fewer than 60 nor more than 70 semester hours of academic and semiprofessional work.

MISSISSIPPI

STATE DEPARTMENT OF EDUCATION

1939

The program of the last two years may be so organized as to be preparatory to the last two years of senior liberal arts, professional, or fine arts colleges; or it may be general, semiprofessional, or terminal.

MONTANA

STATE DEPARTMENT OF PUBLIC INSTRUCTION

1939

Curricula may be of two types. First, two-year terminal curricula for those who will not continue with college work beyond the junior college level. These shall include (1) vocational courses, (2) general courses.

The second type of curricula shall include liberal arts and preprofessional courses for those who intend to enter upon advanced college work.

Teachers of vocational subjects may be employed upon the basis of their qualifications, without regard to academic training. The dean and the teachers of academic subjects must have done graduate work, in the fields in which they teach, of such character as shall warrant their offering courses of college rank.

NEBRASKA

STATE DEPARTMENT OF PUBLIC INSTRUCTION

1931

In all junior colleges the organization of the curricula should be such as to give evidence of the recognization not only of the preparatory function of these institutions but also of their popularizing, terminal, vocational, and guidance functions.

New Hampshire

STATE BOARD OF EDUCATION

1928

A junior college may offer curricula in such vocations as will meet the needs of the students, and there must be at least one curriculum whose completion permits transfer without time loss to a recognized degree-granting college.

New York

UNIVERSITY OF THE STATE OF NEW YORK
(State Education Department)

1935

The course of study shall cover two years of standard college work, and shall be so organized and conducted and shall be of such scope and content as to warrant acceptance, with full credit upon advanced standing, by degree-conferring institutions. Such terminal courses as it offers shall be of distinctly collegiate grade.

North Carolina

STATE DEPARTMENT OF PUBLIC INSTRUCTION

1938

In defining standards for the junior college the committee had in mind an institution covering the first two years of college work. At the same time it is not unmindful of the fact that rarely is the junior college confined to this form of organization; usually these two years of college work are united with two or more of high school work, or with preparatory classes, or with other collateral courses for teachers. Nor does it desire to ignore the possibility that junior colleges may offer, also, courses and curricula of college grade not now typically paralleled in the first two years of work in standard colleges and universities. For the present, however, the committee has not attempted to define more nearly these varying types but has suggested as standards certain requirements pertaining largely, if not exclusively, to these two college years, believing these years to be the essential part of the work. The existence of these two years alone justifies the term "junior college."

Oklahoma

STATE DEPARTMENT OF PUBLIC INSTRUCTION

1928

The foregoing statements are not to be construed as in any way limiting the junior colleges in establishing service programs for their respective communities, wherein courses of instruction are offered in which no credit is given for the completion of such courses, or if such credit be given, students are specifically advised that such credits may not be offered for advanced standing in higher institutions or as satisfying college requirements for teachers' certificates.

PENNSYLVANIA

STATE DEPARTMENT OF PUBLIC INSTRUCTION

1934[9]

The curricula of the junior college should provide for breadth of study and should have justifiable relation to the available facilities and resources. It may provide any or all of the following: (1) broad general education for those not planning to continue their education; (2) definite education for various types of further education; (3) definite vocational education on a semitechnical level.

---

[9] Exact date of adoption not known. Pennsylvania standards, including this statement, were printed in the 1934 edition of *Accredited Higher Institutions* but not in the 1930 edition. See *U.S. Office of Education Bulletin No. 16* (1934), pp. 114-16.

Chapter V

TERMINAL CURRICULA AND ENROLLMENTS

MAX SCHIFERL*

ONE OR MORE TERMINAL CURRICULA were offered in 1938-39 by 308 of the 443 junior colleges for which information is available. These terminal offerings included 58 different semiprofessional and general cultural curricula in which were enrolled 41,507 students, representing 34 per cent of the total number of regular students. These facts are shown graphically in Figure 16.

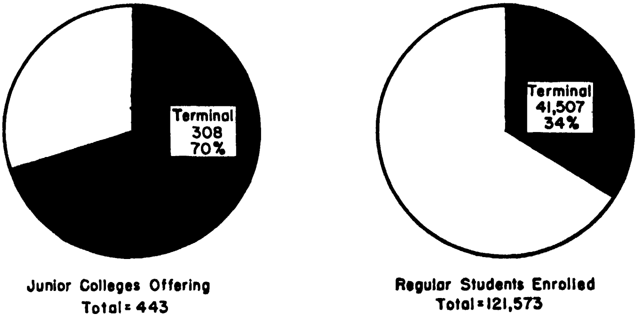


Figure 16. Proportion of Junior Colleges Offering One or More Terminal Curricula and Enrollment of Regular Students in Such Curricula, 1938-39

In this chapter, data on number of institutions offering terminal curricula, curricula offered, and number of students enrolled in them are summarized, with classifications by regional location, type of control, size of institutions, and sex of students admitted. Separate summaries are given for Negro institutions. Supplementary information concerning curricula added since 1938-39 is given in the latter part of the chapter.

Definitions. In the blank sent out to secure information for *American Junior Colleges,*[1] semiprofessional or terminal curricula were defined as those "primarily designed to prepare students for occupations and activities of life." (See appendix, p. 253.) In the later information blank sent to all junior colleges reporting any terminal offerings, the following more detailed definition was used:

---

* Research Assistant, American Association of Junior Colleges, 1940.

[1] Edited by W. C. Eells and published by the American Council on Education, Washington, D.C., 1940.

> "Terminal curricula" are designed for students who wish in one or two years to gain an understanding of their intellectual, social, and civic environments, to explore several fields as an aid in making occupational choice, or to acquire vocational training which will lead to employment in semiprofessional fields. Thus terminal curricula may be of the general or cultural type, of the vocational or semiprofessional type, or a combination of the two. Terminal programs are not intended to prepare students for transfer to four-year colleges or universities, although some graduates may actually enter such institutions.

Sources of information. Information on terminal offerings and enrollments was obtained from questionnaires filled out by 495 accredited junior colleges for the handbook, *American Junior Colleges.*[2] The procedure followed in collecting the information was planned to insure an unusually high degree of accuracy. One page of the 12-page questionnaire, pertained to curricular enrollments. This page is reproduced in the appendix (p. 253). Responsible administrative officers in each junior college were instructed to indicate all preparatory and terminal curricula offered by the institution, and then to state the number of students, if any, enrolled in each curriculum. Each student was to be counted only once, and the total number of students listed as enrolled in all curricula was to equal the total number of students (or of regular students) reported for the institution. After the information for each institution was summarized in the form in which it appears in the handbook, the summary was sent to the institution for verification or possible correction. Misinterpretation of the instructions was eliminated in most instances through correspondence, and in the few cases in which misunderstanding was not cleared up, the data were not included. It is believed that the data finally obtained are, with few exceptions, reasonably accurate.

Institutions and Enrollment for All Terminal Curricula

Of the 443 junior colleges reporting curricular offerings, 308 offered terminal curricula.[3] The names of junior colleges offering

---

[2] Reports for 494 institutions were published in this volume. Information for one additional junior college was available and is included in the present chapter, but there is no institutional exhibit for this institution in *American Junior Colleges.*

[3] Of the 495 junior colleges to which the questionnaires were sent, 443 reported cur-

Table IV. NUMBER OF INSTITUTIONS OFFERING EACH TERMINAL CURRICULUM AND NUMBER OF STUDENTS ENROLLED, 1938–39

Curriculum	Institutions offering curriculum*	Students enrolled
General cultural	137	6,205
Agriculture	67	1,673
General	57	1,254
Floriculture	7	38
Forestry	32	381
Business	241	14,511
General	183	7,068
Accounting	11	490
Banking & finance	4	42
Business law	1	20
Hotel & restaurant management	4	53
Insurance	12	46
Management	1	42
Merchandising	7	290
Salesmanship	31	395
Secretarial	164	6,065
Engineering and technology	90	4,449
General	51	1,550
Agricultural engineering	2	59
Air conditioning	2	10
Auto mechanics	6	67
Aviation	41	1,107
Building trades	8	142
Chemical engineering	8	273
Civil engineering	15	105
Drafting	3	30
Electrical engineering	25	294
Geology	2	9
Mechanical engineering	29	539
Mining	3	16
Navigation	2	7
Oil technology	5	109
Radio engineering	8	102
Welding	1	30
Fine arts	162	3,406
Architecture	29	214
Art	97	1,354
Fashion illustration and costume design	3	31
Interior decoration	3	30
Music	141	1,409
Photography	10	56
Speech and dramatics	20	312
Health services	84	1,603
Civic health	1	108
Laboratory technology	6	46
Medical-secretarial	33	460
Nursing	59	975
Physical therapy	1	14
Home economics	106	1,387
Journalism	86	808
Public service	182	6,500
Civil service	2	8
Library aids	47	197
Military service	3	9
Physical education	62	335
Police officers	6	109
Recreational leadership	19	132
Social service	28	191
Teaching	138	5,519
Miscellaneous	49	965
Cosmetology	3	3
Mortuary science	10	36
Parish secretary	4	23
Religious education	9	97
Printing	4	23
Terminal field not stated	24	783

* The total number of institutions offering terminal curricula was 308 These include 15 institutions which did not report enrollments. Some of the other 293 institutions offered terminal curricula but reported no students enrolled in them.

Institutions which offer several curricula within one of the 10 fields are counted only once in the summary figure for the field as a whole.

terminal curricula, the curricula offered by each institution, and the number of students enrolled in each curriculum are given in the appendix (pp. 212-35). These extensive data are only summarized here; the student interested in more detailed information is referred to the appendix.

Terminal curricula offered. The wide variety of general cultural and semiprofessional curricula offered by junior colleges to meet the

---

ricular offerings. 426 of the 443 furnished data on the number of students enrolled in each curriculum, and 293 of these offered terminal curricula. The latter figures are the totals which appear in most of the tables of this chapter. Supplementary information indicates that, by October 1940, 384 of these junior colleges were offering terminal curricula. See page 66.

needs of their terminal students is shown in Table IV. No less than 58 different curricula were reported, distributed among the following 10 major fields: general cultural, agriculture, business, engineering and technology, fine arts, health services, home economics, journalism, public service, and miscellaneous.

"General cultural" or general courses are curricula which are intended for terminal students but which emphasize the development of social intelligence rather than training for an occupation. The vocational curricula combine instruction in general subjects with training for occupations at semiprofessional and skilled work levels. Analyses of the contents of the courses making up the various curricula are given in Chapter VI. Examples of many of them are shown in the 64-page pictorial supplement at the end of this volume.

Many of these curricula reflect recent changes in the American social system. The variety of courses in business education parallels an increasing complexity and degree of specialization in administrative organization. The many specialized curricula in the field of engineering reflect the requirements of modern machine technology. Curricula for medical secretaries and for laboratory assistants fill needs of a medical profession which has increased its dependence on laboratory analysis in diagnosis and has established more efficient office routines. Courses in agriculture meet a long recognized need for training in the use of scientific methods in the field. Home economics curricula furnish the increased amount of training needed both by the homemaker and by the industries which have absorbed some of the former functions of the home.

Most of the semiprofessional curricula offered by junior colleges are intended neither to duplicate the work of universities and professional schools nor to add frills to types of training already adequately taken care of by secondary schools. Rather, they tend to fill a vacuum created by the increasing complexity of our economic and social life. Work which formerly required only a professional engineer and a gang of unskilled workers now requires an additional "middle group" of clerks and technicians. It is for the training of such new groups of clerical and technical workers that junior colleges are particularly well adapted. Similarly, the nonvocational training given by the junior college meets new needs of a large group of young people who will not complete four-year college courses but who need educational experiences beyond those offered by the traditional secondary school if they are to fulfill their function as intelligent citizens. Again, additional training is made desirable by the increased complexity of the social order and by the number of problems which arise in its operation.

Fully as important in some respects as the curricula offered by a large number of junior colleges are those offered by only a few. Many of these curricula have been planned to meet special needs of the communities served by the junior colleges. Courses in agriculture are not needed in urban communities but are important in rural districts. Oil technology is reported by only five institutions, but these are located in oil-producing areas which require technically trained workers. Civic health and police training are given in large cities which require a number of workers in these fields. Many of the curricula which are now offered by only a few junior colleges are probably needed in a large number of communities. These curricula are important not only as services to the communities in which they are now offered, but also as pioneering steps.

Number of junior colleges offering each of the terminal curricula. Table IV indicates the number of the 308 junior colleges reporting terminal enrollments that offered each of the general cultural and semiprofessional curricula. Examination of the table shows that curricula in the business field are offered by the largest number of institutions, with curricula in the fields of public service, fine arts, general cultural courses, home economics, engineering and technology, journalism, health services, and agriculture following in that order.

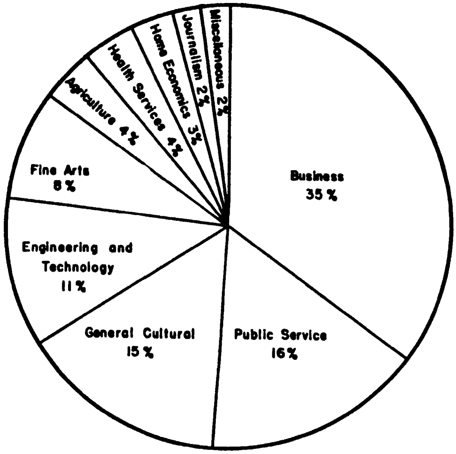
The specific curricula offered by the largest number of institutions are also in the business field, general business being offered by 183 institutions and secretarial curricula by 164. Music is third, being offered by 141 institutions; teaching fourth, by 138; general courses fifth, by 137; and home economics sixth, by 106. All other curricula are offered by fewer than 100 institutions.[4]

Enrollments in each of the terminal curricula. Enrollments in specific curricula and in each terminal field are also given in Table IV. The percentage of the 41,507 students enrolled in each of the 10 major terminal fields is shown in Figure 17. More than one-third of the students are enrolled in business curricula, and large percentages are also enrolled in public service, general cultural courses, and engineering and technology.

Surprisingly low percentages are found for agriculture (4 per cent) and for home economics (3 per cent). It is not known how many of the students enrolled in terminal curricula will be occupied eventually in agriculture, but it is certain that most women students will be homemakers. The extent to which these future homemakers are obtaining adequate training, however, may not be reflected accurately by the curricular enrollments, since many of these students may take individual home economics courses while enrolled in general cultural, fine arts, or business curricula. It would seem reasonable, however, that much larger enrollments normally might be expected in these two fields.

---

[4] But see p. 67 for exception in case of aviation.



41,507 students in 293 institutions
1938-39

Figure 17. Proportion of Enrollments in Principal Types of Terminal Curricula, 1938-39

Junior colleges offering terminal curricula, by region, state, and type of institution. The number and percentage of institutions offering terminal curricula, classified by region, size, type of control, and sex of students admitted are indicated in the first three columns of Table V. The following outstanding facts are shown in this table.

Terminal curricula are offered by 74 per cent of the public institutions, by 64 per cent of the private ones, and by 69 per cent of the entire group of 426 junior colleges.

Junior colleges in all of the six regional areas offer terminal curricula. The largest percentages of public junior colleges are found in the Northwest and Western regions, and of private junior colleges, in the New England and Middle states regions. Terminal curricula are offered by less than half of the institutions in two regional groups, the public institutions of the Middle states and the private institutions of California.

A direct relationship may be noted between size of institution and the percentage of institutions offering terminal curricula. The small-

Table V. ENROLLMENT IN TERMINAL CURRICULA FOR VARIOUS GROUPS OF JUNIOR COLLEGES, 1938–39

Group	Institutions			Enrollment of Regular Students		
	Number reporting	Number offering terminal curricula	Per cent offering terminal curricula	In all curricula	In terminal curricula	Per cent in terminal curricula
All Institutions	**426**	**293**	**69**	**121,573**	**41,507**	**34**
Public	204	150	74	87,487	30,261	35
Private	222	143	64	34,086	11,246	33
Region—Public						
New England	0	0	–	–	–	–
Middle states	6	1	17	893	81	9
North Central	110	76	69	34,171	7,389	22
Southern	46	32	70	14,395	4,313	30
Northwest	6	6	100	3,044	918	30
Western (California)	36	35	97	34,984	17,560	50
Region—Private						
New England	20	17	85	3,331	2,176	65
Middle states	30	23	77	3,716	1,372	37
North Central	61	32	52	8,460	2,271	27
Southern	92	61	66	15,823	5,033	32
Northwest	10	6	60	1,901	175	9
Western (California)	9	4	44	855	219	26
Size—Public						
Small (0–99)	37	13	35	2,336	231	10
Medium (100–499)	126	98	78	31,650	10,192	32
Large (500–999)	18	16	89	12,383	4,236	34
Very large (1,000 and over)	23	23	100	41,118	15,602	38
Size—Private						
Small (0–99)	92	43	47	5,713	1,474	26
Medium (100–499)	125	95	76	24,885	9,215	37
Large (500–999)	3	3	100	1,412	316	22
Very large (1,000 and over)	2	2	100	2,076	241	12
Type of Control—Public						
Local	169	124	73	71,688	25,467	36
State	35	26	74	15,799	4,794	30
Type of Control—Private						
Denominational	157	93	59	24,175	7,380	31
Undenominational nonprofit	53	42	79	8,276	3,272	40
Proprietary	12	8	67	1,635	594	36
Sex of Students—Private						
Coeducational	126	79	63	21,090	6,425	30
Women	71	58	82	10,591	4,629	44
Men	25	6	24	2,405	192	8
Negro	**19**	**13**	**68**	**2,549**	**1,358**	**53**
Public	4	4	100	752	553	74
Private	15	9	60	1,797	805	45

est percentage of both public and private junior colleges offering terminal curricula is found among small junior colleges, the percentages increasing with size of institution.

No important difference is found between state and locally controlled public junior colleges, but there are significant differences among private junior colleges with different types of control.

Terminal curricula are more frequent in private junior colleges for women than in coeducational institutions. They are relatively infrequent in the private junior colleges for men.

All public institutions for Negroes and 60 per cent of the private ones offer terminal curricula.

The number of public and private junior colleges in each state which offer terminal curricula are given in the appendix (pp. 236-37).

Terminal enrollments, by region, state, and type of institution. The number and percentage of regular students enrolled in terminal curricula in each region and in each type of institution are given in the last three columns of Table V. These data are also summarized for the more important groups in Fig. 18.

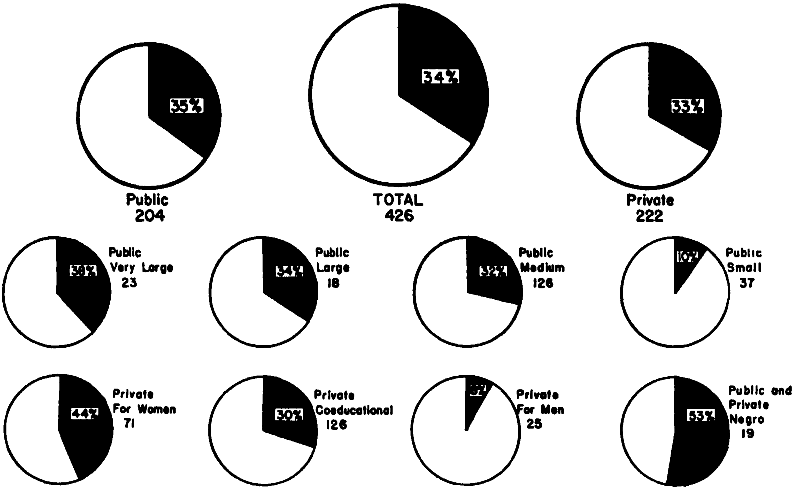


Figure 18. Terminal Enrollments in Various Types and Groups of Public and Private Junior Colleges, 1938-39

There is no significant difference between the percentages enrolled in the public and in the private institutions, 35 and 33 per cent, respectively. Privately controlled junior colleges of New England have the highest percentage among regional groups, 65 per cent, followed by California public institutions with 50 per cent. (California public junior colleges account for 42 per cent of the total terminal enrollment.) Private institutions of the Middle states are also above the average, with 37 per cent of their students enrolled in terminal curricula. The lowest proportional enrollments are found among the public institutions of the Middle states and North Central states, and among the private institutions of the Northwest. Similar data, both for public and private junior colleges, in each case classified by states, are given in the appendix (pp. 236-37).

The percentage of students enrolled in terminal curricula in public junior colleges increases with size of institution, varying from 10 per cent for small institutions to 38 per cent for very large ones. In interpreting this statement it should be remembered that most of the large and very large institutions are found in California, and 50 per cent of the students of these junior colleges are enrolled in terminal curricula. No such uniform trend, however, is found in the case of the private junior colleges.

The medium-sized private institutions also have a higher proportion of students enrolled in terminal curricula than have the smaller ones, the percentages being 37 and 26 respectively. Only five large and very large private institutions are represented—too small a number to use as the basis of reliable generalizations.

As noted above, there is practically no difference between the proportion of students enrolled in terminal curricula in public and in private junior colleges as a whole. There are, however, somewhat larger differences among the proportions enrolled in institutions under different types of control within these two main classifications.

Very significant differences are found when junior colleges are classified by sex of students admitted. Institutions for women enroll more than five times as many students on a proportional basis in terminal curricula as do those for men—and coeducational institutions enroll almost four times as many. The enrollment in junior colleges for men is the smallest percentage found for any of the classifications studied.

Over half of the students in junior colleges for Negroes are enrolled in terminal curricula, and the highest proportion for any group (almost three-fourths) is found in the four public junior colleges for Negroes.

Institutions and Enrollments for Ten Groups of Terminal Curricula

Percentage of students enrolled in each terminal field. The percentage of the 41,507 students enrolled in each of the 10 major terminal fields, by region, type of control and size of institution, and sex of students admitted, and for Negro institutions, is given in Table VI. This table shows the distribution among the 10 curricular fields of the students enrolled in terminal curricula in each group of junior

Table VI. PERCENTAGE OF STUDENTS ENROLLED IN EACH TERMINAL FIELD, 1938–39

Group	Number enrolled in all terminal curricula	Per cent enrolled in									
		General cultural	Agriculture	Business	Engineering	Fine arts	Health services	Home economics	Journalism	Public service	Unclassified
All Institutions	**41,507**	**15.0**	**4.0**	**35.0**	**10.7**	**8.2**	**3.9**	**3.3**	**1.9**	**15.7**	**2.3**
Public	30,261	15.6	5.4	37.4	12.9	7.7	3.4	2.9	2.2	10.0	2.5
Private	11,246	13.2	0.4	28.8	4.7	9.5	5.1	4.5	1.2	30.8	1.8
Region—Public											
New England	–	–	–	–	–	–	–	–	–	–	–
Middle states	81	63.0	–	37.0	–	–	–	–	–	–	–
North Central	7,389	13.1	1.7	48.9	9.5	2.6	3.2	0.7	1.7	16.5	2.1
Southern	4,313	17.9	19.8	18.9	7.1	4.2	2.0	9.3	0.4	19.1	1.3
Northwest	918	–	–	31.1	14.6	0.2	6.8	0.8	–	17.1	29.4
Western (California)	17,560	16.6	3.7	37.2	15.8	11.2	3.7	2.4	3.0	4.8	1.6
Region—Private											
New England	2,176	13.8	0.3	38.9	17.7	4.7	11.4	8.7	1.2	1.7	1.6
Middle states	1,372	30.1	0.1	26.4	3.4	20.9	3.8	8.0	1.8	2.4	3.1
North Central	2,271	8.8	0.2	27.1	2.2	6.0	3.3	1.4	2.2	45.4	3.4
Southern	5,033	10.5	0.6	26.3	0.9	9.8	0.9	3.1	0.5	46.5	0.9
Northwest	175	13.2	–	8.0	2.9	16.5	52.0	–	4.6	1.7	1.1
Western (California)	219	5.0	0.8	32.3	–	8.7	26.8	11.4	–	15.0	–
Size—Public											
Small (0–99)	231	13.8	2.2	32.4	1.8	1.3	9.1	1.8	0.9	35.8	0.9
Medium (100–499)	10,192	15.7	8.9	33.5	8.4	4.0	2.1	5.0	1.5	18.7	2.2
Large (500–999)	4,236	19.3	4.0	41.6	13.2	6.3	3.6	1.8	1.7	6.9	1.6
Very large (1,000 and over)	15,602	14.6	3.5	38.7	16.0	10.6	4.2	1.8	2.8	4.8	3.0
Size—Private											
Small (0–99)	1,474	16.1	0.1	26.7	1.0	8.9	4.3	4.1	2.1	34.1	2.6
Medium (100–499)	9,215	13.3	0.4	27.3	4.7	9.2	5.1	4.9	1.1	32.3	1.7
Large (500–999)	316	–	–	48.1	26.9	19.0	4.8	0.6	0.6	–	–
Very large (1,000 and over)	241	–	–	72.2	–	10.4	12.0	–	–	–	5.4
Type of Control—Public											
Local	25,467	16.8	3.1	40.1	13.4	8.9	3.8	1.9	2.5	8.1	1.4
State	4,794	9.1	17.8	21.6	10.6	2.1	1.3	8.2	0.8	20.1	8.4
Type of Control—Private											
Denominational	7,380	9.3	0.5	28.1	1.0	7.3	3.8	2.4	1.3	44.3	2.0
Undenominational nonprofit	3,272	20.0	0.1	29.2	14.1	11.8	8.1	9.5	1.0	5.4	0.8
Proprietary	594	23.5	–	34.8	–	23.6	5.3	3.9	1.4	2.8	4.7
Sex of Students—Private											
Coeducational	6,425	7.9	0.6	25.7	7.8	3.5	2.8	1.4	1.0	47.2	2.1
Women	4,629	21.1	–	30.8	–	18.1	8.6	9.1	1.5	9.3	1.5
Men	192	–	1.0	79.7	17.7	–	–	–	1.6	–	–
Negro	1,358	1.3	4.7	0.9	5.2	0.4	1.3	10.8	–	75.4	–
Public	553	–	11.2	1.3	12.7	–	3.3	23.7	–	47.8	–
Private	805	2.2	0.2	0.7	–	0.6	–	1.9	–	94.4	–

colleges. It indicates the groups of institutions which offer curricula in each field, and the popularity of curricula in each field among students attending each group of institutions. The following are some of the outstanding features of the table.

General cultural. The largest percentages of students enrolled in general cultural courses are found among the public and private institutions of the Middle states, among undenominational nonprofit and proprietary institutions, and among junior colleges for women. The most significant difference among classification of public institutions is that between locally controlled junior colleges, with 17 per cent[5] of their students enrolled in this curriculum, and state controlled institutions, with 9 per cent. Relatively small percentages of students are enrolled in this curriculum in the private junior colleges of the North Central and Western states, in denominationally controlled institutions, in coeducational institutions, and in junior colleges for men.

Agriculture. Nearly all of the students enrolled in agriculture are in public junior colleges. Within this group agricultural curricula are most popular in the Southern states, in state controlled institutions, and in Negro institutions.

Business. The percentage of students enrolled in business curricula is distinctly higher in public junior colleges than in private ones, and is almost twice as high for locally controlled as for state controlled institutions. Of the students of private junior colleges for men, 80 per cent are enrolled in business curricula. The percentages are relatively large in the public junior colleges of the North Central states, and relatively small in the public institutions of the Southern states and in the private institutions of the Northwest.

Engineering and technology. Engineering curricula are much more commonly taken in public than in private institutions, and, within the public group, are most frequent in the Northwest and California. Of the students of New England private institutions, 18 per cent are enrolled in engineering curricula, while less than 4 per cent of the students of other regional groups of private institutions are enrolled in this field. Engineering curricula are selected much more frequently in undenominational nonprofit junior colleges than in private institutions with other types of control. There is a direct relationship between size of institution and the percentage of students enrolled in engineering curricula.

---

[5] In the text, nearest unit percentage values are used. A higher degree of accuracy is possible by reference to Table VI.

Fine arts. The regional groups among which fine arts curricula are most popular are in the public junior colleges of California and in the private institutions of the Middle states and the Northwest. Locally controlled public institutions enroll a much greater proportion of their students in this field than do state controlled institutions. Private junior colleges for women enroll a greater proportion than do coeducational institutions. The proportion of students enrolled in this field tends to increase with size of institution.

Health services. Relatively large percentages of the students of private junior colleges of the New England states and in private institutions for women are enrolled in health curricula. A large proportion of the few students of the private institutions of the Northwest and Western states are also enrolled in the curricula of this field.

Home economics. This curriculum is most popular in the public institutions of the Southern states and in the private institutions of New England, the Middle states, and California. Among public junior colleges the percentage of students enrolled in home economics is relatively high in medium-sized institutions and in state controlled institutions. Among private junior colleges, the proportions are highest for undenominational nonprofit institutions and for junior colleges for women. Public Negro institutions enroll a larger percentage of their students in this curriculum than does any other group.

Journalism. The percentage of students enrolled in journalism is small for all classifications, the highest percentage being 5.

Public service. Most of the students enrolled in public service are in teaching curricula. The proportion of students enrolled in this field in private institutions is three times that of public institutions. California public junior colleges have only one-fourth as large a percentage of students enrolled in the field as have other public regional groups. The low percentage in California public institutions is due to the fact that teachers cannot be prepared in junior colleges in the state. State controlled public junior colleges have a much greater proportion of their students enrolled in the field than have locally controlled institutions. The proportions enrolled in private junior colleges are largest in the North Central and Southern states, and in denominational and coeducational institutions. Private Negro institutions have 94 per cent of their students enrolled in public service curricula, mainly in teaching; 48 per cent of the students of public Negro institutions are enrolled in this field.

Tables showing the number of institutions of each classification which offer curricula in each of the fields and the number of students enrolled in them are given in the appendix (pp. 238-39).

Adequacy of Provisions for Terminal Students

Are the number of terminal curricula offered and the enrollments in them large enough to meet the needs of students? One answer to this question is indicated by a comparison of the number of junior college students who do not continue their formal education beyond the sophomore year with the number enrolled in terminal curricula. Such a comparison is made in Table VII.

About 75 per cent of the students entering junior colleges as freshmen do not continue their formal education beyond the sophomore year. In other words, 75 per cent of all regular junior college students are terminal students, but only 34 per cent of these students are enrolled in terminal curricula.[6] The difference of these two figures shows that *more than 40 per cent of all junior college students are enrolled in curricula which are not planned primarily best to meet their needs.*

Of all groups, only the private junior colleges of the New England states and the public junior colleges for Negroes report an enrollment in terminal curricula which even approximates the proportion of terminal students. The public junior colleges of the Middle states, the private junior colleges of the Southern and Northwest states, and the small public institutions report that less than 50 per cent of their students are enrolled in curricula planned to meet their needs. Similar proportions for other groups vary from 53 to 76 per cent.

A comparison of proportion of students dropping out of school during or at the close of their junior college education, with proportion of students enrolled in terminal curricula as reported in Table VII, is shown in Figure 19, for the country as a whole and for the

---

[6] Actually, the percentage for drop-outs, 75, applies only to freshmen, while the percentage for terminal enrollment, 34, applies to both freshmen and sophomores. Since a smaller percentage of sophomores than of freshmen are terminal students, comparison of the two percentages involves some inaccuracy The error involved, however, is not significant. Data to be presented in the later monograph, *Why Junior College Terminal Education?*, show that 67 per cent of the sophomores do not continue their education beyond the sophomore year, and only 34 per cent of the total number of regular students are sophomores. The error involved, therefore, is about 3 per cent.

Table VII. Drop-Outs Versus Terminal Enrollments in Junior Colleges*

Group	Drop-Outs			Terminal Enrollments
	Number of institutions reporting	Number of freshmen 1937–38	Percentage of freshmen not continuing formal education beyond sophomore year	Percentage of regular students enrolled in terminal curricula 1938–39
All Institutions	**392**	**57,826**	**75**	**34**
Public	190	40,868	77	35
Private	202	16,958	71	33
Region—Public				
New England	0	–	–	–
Middle states	5	345	69	9
North Central	99	16,064	75	22
Southern	47	9,050	77	30
Northwest	5	943	74	30
Western (California)	34	14,466	78	50
Region—Private				
New England	19	1,773	73	65
Middle states	27	1,947	68	37
North Central	49	4,034	67	27
Southern	87	7,721	73	32
Northwest	11	974	73	9
Western (California)	9	509	70	26
Size—Public				
Small (0–99)	27	1,143	79	10
Medium (100–499)	127	17,967	75	32
Large (500–999)	18	6,455	75	34
Very large (1,000 and over)	18	15,303	79	38
Size—Private				
Small (0–99)	81	2,944	70	26
Medium (100–499)	118	12,718	72	37
Large (500–999)	1	217	78	22
Very large (1,000 and over)	2	1,079	57	12
Type of Control—Public				
Local	156	32,974	77	30
State	34	7,894	77	36
Type of Control—Private				
Denominational	141	11,878	70	31
Undenominational nonprofit	48	4,018	72	40
Proprietary	13	1,062	70	36
Sex of Students—Private				
Coeducational	118	10,231	74	30
Women	62	5,228	68	44
Men	22	1,499	60	8
Negro	**20**	**1,304**	**80**	**53**
Public	4	362	75	74
Private	16	942	82	45

* The data for the "Number of freshmen, 1937–38" were obtained from the *Junior College Directory, 1939*. The data for "Percentage of freshmen not continuing formal education beyond sophomore year" were obtained by subtracting from the number of freshmen for 1937–38 the number of graduates for 1938–39 who continued their formal education, as given in *American Junior Colleges*. A more complete table showing also the number of sophomores and of graduates for 1938–39 and a full description of the methods used in obtaining the information will be found in *Why Junior College Terminal Education?*

publicly and privately controlled junior colleges separately. Figure 20 is constructed on exactly the same basis for the junior colleges of each of the six regional areas. Studied horizontally, these two figures permit significant comparisons between "drop-outs" and terminal enrollments. The upper part of Figure 19, for example, shows that for the United States as a whole 34 per cent of the students are enrolled in various types of terminal curricula which are designed primarily to prepare them for what actually 75 per cent of them will do—

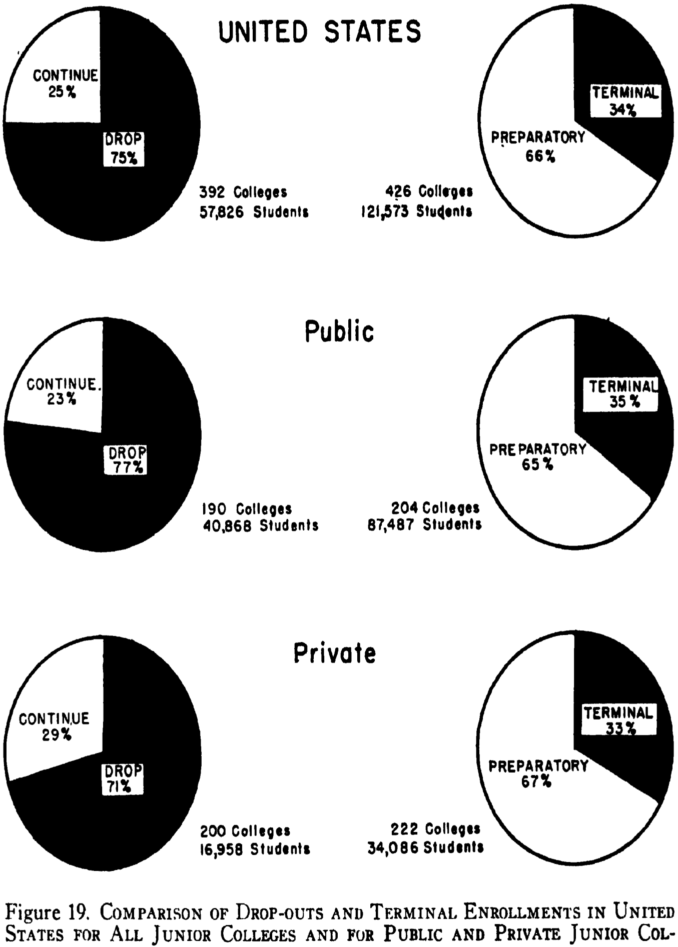


Figure 19. Comparison of Drop-outs and Terminal Enrollments in United States for All Junior Colleges and for Public and Private Junior Colleges, 1938-39

terminate their formal education with the junior college. It also shows that 66 per cent of the students are enrolled in courses of a university preparatory type designed primarily to prepare them for what only 25 per cent will do—transfer to the upper division of the university and the professional school. Similar comparisons may be made for

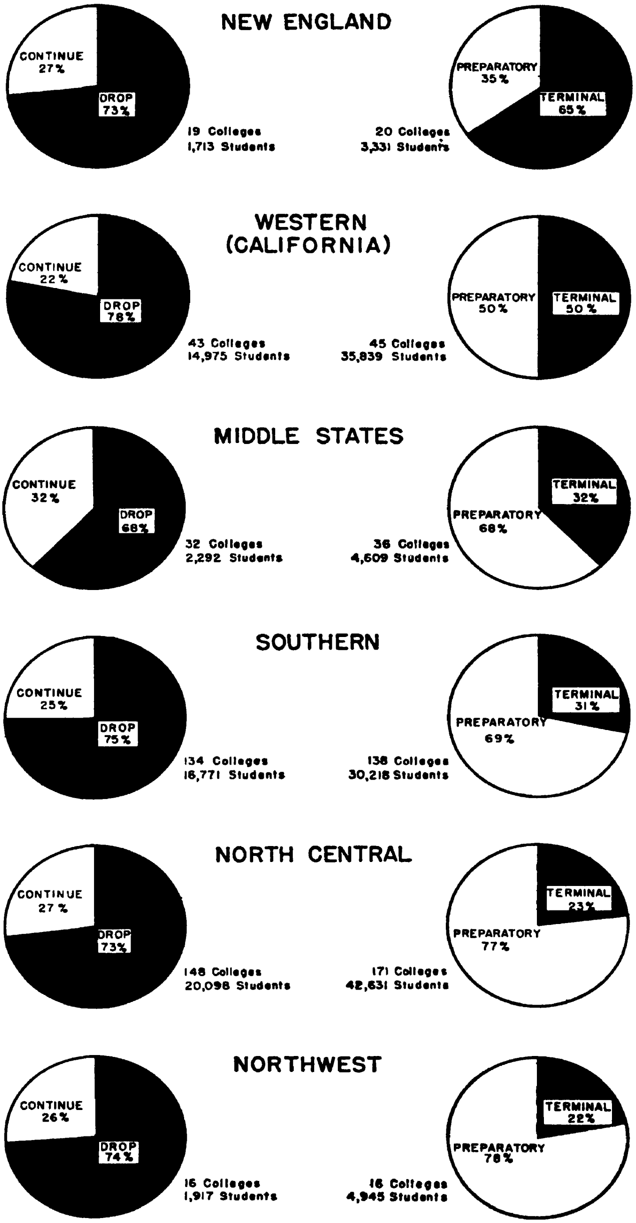


Figure 20. COMPARISON OF DROP-OUTS AND TERMINAL ENROLLMENTS IN SIX REGIONAL AREAS, 1938-39

public and private junior colleges, and for the institutions in each regional area. It should be noted that there are no significant differences in public and in private junior colleges. The problem is essentially the same for both types of institutions.

Studied vertically, Figure 20 permits comparisons between the percentages of terminal students enrolled, varying from 65 per cent in the junior colleges of New England to 22 per cent in those of the Northwest. Proportions continuing in the university vary from 32 per cent in the Middle states to 22 per cent in the Western area (California).

Data similar to that of Table VII, for public and private junior colleges separately, classified by states are given in the appendix (pp. 240-41). For 20 selected states information similar to that of Figure 20 is given in Figure 21, showing a variation in terminal enrollments from 73 per cent in Connecticut to only 6 per cent in Washington.

The data given above constitute only an approximate index of the adequacy of the provisions junior colleges have made for their terminal students. Further analysis might show that some of the curricula classed as preparatory or preprofessional are fairly well suited to the needs of terminal students, especially if the content of such curricula and the instructional methods used in them are modified suitably for terminal students. It is far more likely, on the other hand, that such an analysis would show that a large number of the curricula classed as terminal are made up of the same courses as those commonly offered to preparatory students, and that they are not particularly well adapted to the needs of the terminal group. It is probable, on the whole, that the figures given in Table VII overestimate the adequacy of provisions for terminal students.

Terminal Curricula Added Since 1938-39

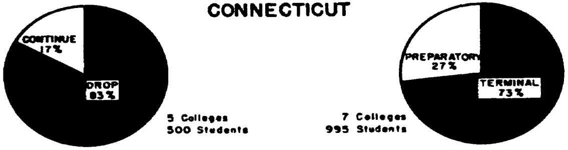
In order to bring the information on the number of institutions offering terminal curricula and the nature of the curricula offered as nearly up to date as possible, reports on the terminal curricula added since 1938-39 were requested in October, 1940 from the 443 institutions from which the original data were obtained.[7] Reports were received from 312 institutions. These reports were supplemented with information obtained by examination of the latest available catalogs[8] of

---

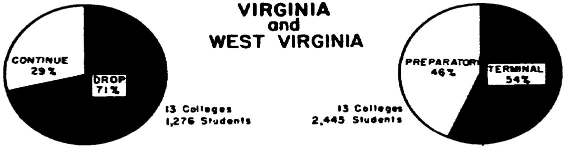
[7] Information on the number of students enrolled in these curricula was also requested, but the data obtained were not complete enough to be used.

[8] Catalogs containing announcements of courses for 1940-41 were used for all but 11 institutions. For these, only 1939-40 announcements were available.

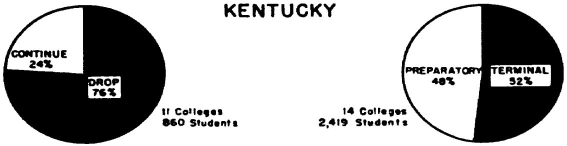
CONNECTICUT



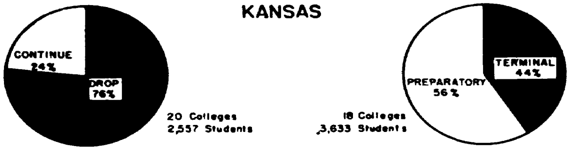
VIRGINIA and WEST VIRGINIA



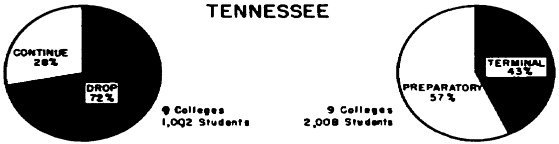
KENTUCKY



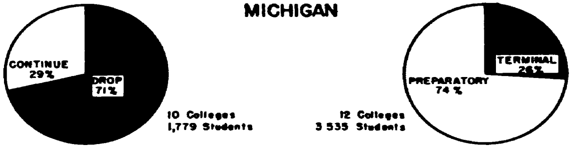
KANSAS



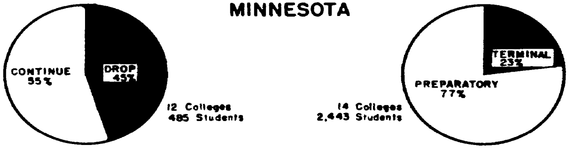
TENNESSEE



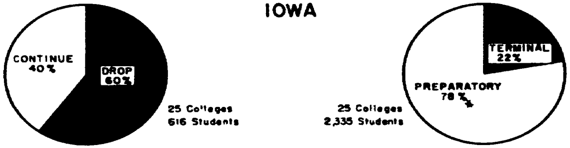
MICHIGAN



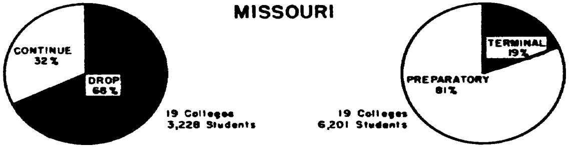
MINNESOTA



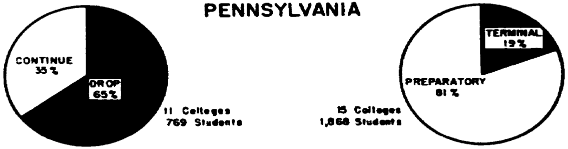
IOWA



MISSOURI



PENNSYLVANIA



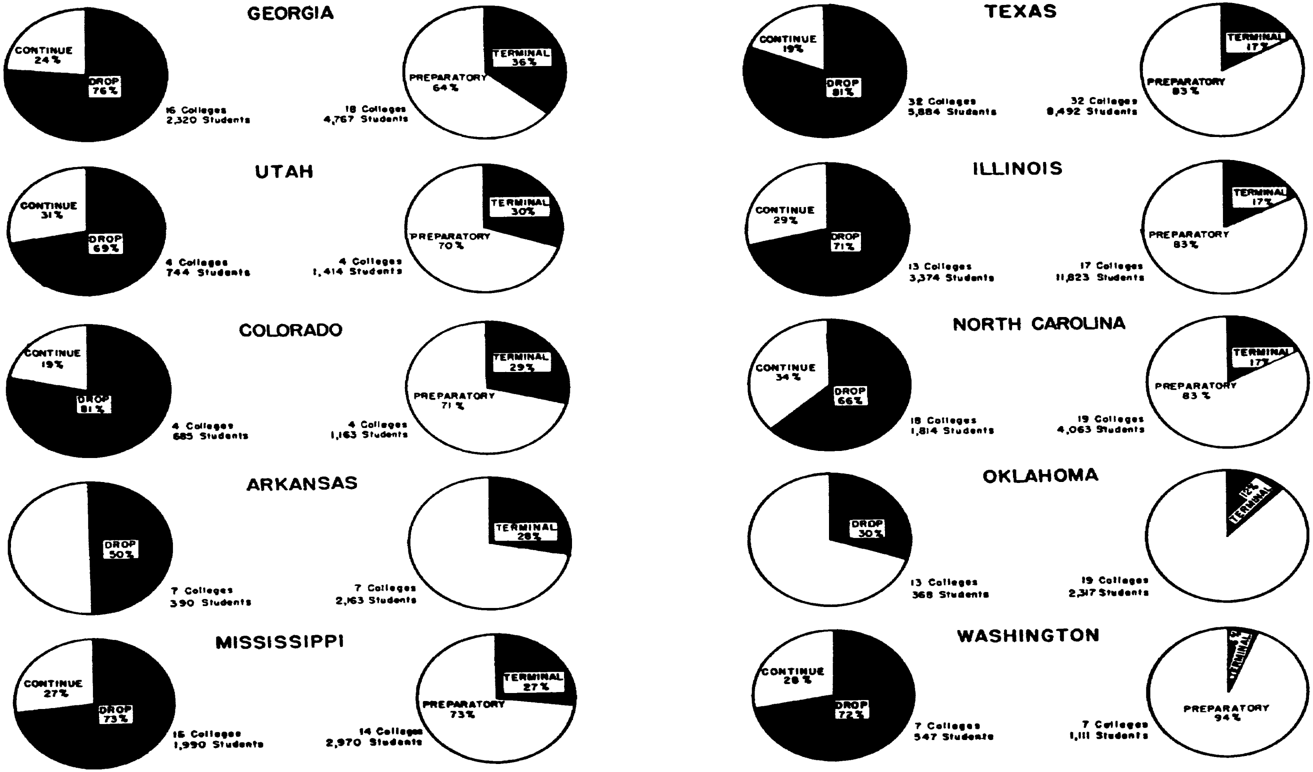


Figure 21. COMPARISON OF DROP-OUTS AND TERMINAL ENROLLMENTS IN 20

another 122 institutions, leaving only nine institutions for which supplementary information was not available. In addition, an authoritative list of the junior colleges offering civilian pilot training programs under the auspices of the Civil Aeronautics Authority was obtained from a recent special study.[9]

Of the 434 institutions for which supplementary information was obtained, 249 were found to offer one or more terminal curricula in addition to those previously reported. The names of the 249 institutions are indicated in Table XXVIII (pages 212-29). The additional curricula offered by each of the institutions are given in lists following the table (pages 230-35).[10]

Of the 249 junior colleges, 76 are institutions not heretofore reported as offering terminal curricula. The names of these institutions are given in footnotes to each of the state headings of Table XXVIII (pages 212-29). The number of institutions offering terminal curricula is thus increased from 308 to 384. In other words, 384 of the 443 institutions or 87 per cent offer terminal curricula.[11]

The way in which this supplementary information affects the summaries of terminal offerings is shown in Table VIII. The large number of institutions offering pilot training programs increases the number offering engineering and technical curricula from 90 to 216, making this field second only to business in the number of institutions by which curricula in it are offered.

Among specific courses, general business and secretarial curricula still are offered by the largest number of institutions, but secretarial courses now are offered by only two less institutions than offer general business courses, and aviation is offered by only eight less than offer general business. Other important additions are home economics, which is offered by 30 additional institutions; teaching, by 23; and general agriculture, by 14. Merchandising is reported now by 28 institutions instead of 7; drafting, by 13 instead of 3; and accounting, by 27 instead of 11. The additions for merchandising, drafting, and accounting probably reflect the inadequacy of the original questionnaire used, rather than markedly increased offerings within a two-year period. These curricula were not listed in the questionnaire used in obtaining the information for 1938-39, and it appears that some institutions, instead of writing in the names of these curricula, listed students enrolled in them under the most nearly appropriate general heading. Probably the number of institutions and the number of students enrolled in many of the curricula which were not listed in the questionnaire are larger than the reports indicate.[12]

---

[9] W. C. Eells, "The Civilian Pilot Training Program," *Junior College Journal* (November 1940), 11:125-30.

[10] In a few instances the additional curricula were offered in 1938-39 but were not reported until after the data for that year were tabulated.

[11] Twenty-seven of these offer only Civil Aeronautics Authority pilot training programs.

Table VIII. NUMBER OF INSTITUTIONS OFFERING EACH TERMINAL CURRICULUM, 1938–39 AND 1939–41

Curriculum	Number of institutions reporting curriculum			Curriculum	Number of instistution reporting curriculum		
	Total	For 1938–39	Subsequently*		Total	For 1938–39	Subsequently*
General cultural	**146**	**137**	**9**	**Fine arts**	**172**	**162**	**10**
				Architecture	30	29	1
Agriculture	**83**	**67**	**16**	Art	100	97	3
General	71	57	14				
Floriculture	8	7	1	Fashion illustration and costume design	7	3	4
Forestry	34	32	2	Interior decoration	6	3	3
				Music	145	141	4
Business	**286**	**241**	**45**	Photography	16	10	6
General	204	183	21	Speech and dramatics	24	20	4
Accounting	27	11	16				
Banking and finance	6	4	2	**Health services**	**93**	**84**	**9**
Business law	1	1	0	Civic health	1	1	0
				Laboratory technology	7	6	1
Hotel and restaurant management	5	4	1	Medical-secretarial	44	33	11
Insurance	12	12	0	Nursing	59	59	0
Management	1	1	0	Physical therapy	1	1	0
Merchandising	28	7	21				
Salesmanship	34	31	3	**Home economics**	**136**	**106**	**30**
Secretarial	202	164	38				
				Journalism	**86**	**86**	**0**
Engineering and technology	**216**	**90**	**126**	**Public service**	**206**	**182**	**24**
General	65	51	14	Civil service	2	2	0
				Library aids	47	47	0
Agricultural engineering	2	2	0	Military service	3	3	0
Air conditioning	2	2	0	Physical education	63	62	1
Auto mechanics	11	6	5	Police officers	8	6	2
Aviation	196	41	155	Recreational leadership	20	19	1
Building trades	14	8	6	Social service	28	28	0
Chemical engineering	8	8	0	Teaching	161	138	23
Civil engineering	15	15	0				
Drafting	13	3	10	**Miscellaneous**	**50**	**49**	**1**
Electrical engineering	29	25	4	Cosmetology	6	3	3
Geology	2	2	0	Mortuary science	10	10	0
Mechanical engineering	34	29	5	Parish secretary	4	4	0
Mining	3	3	0	Religious education	9	9	0
Navigation	2	2	0	Printing	4	0	0
Oil technology	7	5	2				
Radio engineering	12	8	4	Terminal field not stated	24	24	0
Welding	6	1	5				

* Includes some institutions which offered the curriculum in 1938–39 but for which information was not available until after the data for that year were tabulated.

On the other hand, some curricula are not represented in the supplementary reports. Examination of catalogs and correspondence with junior colleges indicates that some of the institutions which reported certain terminal curricula—especially music, nursing, journalism, and library aides—actually have only preparatory courses in these fields.

---

[12] The page of the Information Blank which pertains to curricular enrollments is reproduced in the appendix (p. 253).

No information on enrollments in terminal curricula for 1939-40 and 1940-41 is available, and consequently nothing can be said with certainty regarding the adequacy of the programs of these years in meeting the needs of terminal students. But the large number of curricula added does suggest that the gap observed above, between the number of students who will not continue their formal education beyond the junior college level and the number enrolled in terminal curricula, may have been narrowed to some extent during these two years.

Number of Curricula Offered, by Institutions

To what extent does a single junior college offer a variety of terminal curricula? An examination of the data summarized in *American Junior Colleges* (pp. 517-48) or in the appendix of the present volume (pp. 212-29) shows that there are 54 institutions which report offering only one terminal curriculum each, and 49 more which offer only two. At the other extreme are 19 institutions which offer from 16 to 35 terminal curricula each. All but one of these 19 are located in California. Details are shown in Table IX.

Table IX. Number of Junior Colleges Offering Indicated Number of Terminal Curricula, 1938–39 (N = 321)

Number of curricula	Number of junior colleges	Number of curricula	Number of junior colleges
1	54		
2	49	16	3
3	33	17	3
4	27	18	1
5	29	19	1
6	29	20	1
7	20	21	2
8	15	22	1
9	10	23	1
10	14	24	2
11	10	25	1
12	6	26	1
13	4	29	1
14	2	35	1

Following are the terminal curricula offered by a half dozen selected institutions havin unusually varied programs. Titles of courses are those used in the catalogs of the institutions.

Fullerton Junior College

- Business education—
  - Bookkeeping and accounting
  - General business
  - Secretarial
  - Clerical
  - Merchandising
- Humanities—
  - Applied music
  - Art
  - Newspaper
- Life science—
  - Applied horticulture
  - Nursing
  - Physician's and dentist's assistant
  - Homemaking
  - Costume design
  - Interior decoration
  - Cosmetology
- Technical education—
  - Practical aeronautics
  - Aircraft fabrication and maintenance
  - Airplane design—drafting
  - Pilot flight training
  - Flight and commissioned training
  - Diesel engines
  - Foundry
  - Machine shop
  - Mill and cabinet work
  - Ornamental iron and welding
  - Printing
  - Production control

Long Beach Junior College

- General—
  - Fine arts
  - Liberal arts
  - Journalism
  - Music
  - Social arts
- Occupational—
  - Accounting
  - Advertising art
  - General art
  - Advertising and salesmanship
  - General business
  - Secretarial (general)
  - Engineering
  - Medical assistants
  - Modern music
  - Vocal music
  - Recreational leadership
  - Speech arts
  - Navigation

Los Angeles City College

- Accounting
- Art
- Architectural engineering
- Aviation engineering
- Banking
- Bookkeeping
- Business management
- Clerical library aides
- Civil engineering
- Clerical
- Cultural arts
- Dental assistants
- Drama
- Electrical engineering
- English
- Finance
- General business
- General law
- Home administration
- Journalism, technical
- Journalism, liberal arts
- Liberal arts
- Mechanical engineering
- Merchandising
- Music
- Nurses
- Opera
- Police officers
- Public health sanitation
- Radio and sound
- Photography
- Recreational leadership
- Secretarial training

Pasadena Junior College

- Liberal arts
- Accounting
- Art
- Clothing or costume
- Auto mechanics
- Aviation technology
- Building construction
- Business education
- Child development
- Civil technology
- Clerical
- Cosmetology
- Doctor's and dentist's assistant
- Electrical technology
- Forestry
- Landscape design

Mechanical technology
Merchandising
Music
Nursing
Painting and decorating
Personnel
Playground leadership
Recreational leadership
Secretarial
Stage technology

San Francisco Junior College

Accounting
Civil Service accounting
Civil Service secretarial
Civil Service machine calculation
Civilian pilot training
Commercial art and advertising
Community recreation for women
Costume design and construction
Drafting
Electrical technology
Floriculture
General business
Home management
Hospital training
Hotel and restaurant management
Insurance
Landscape architecture
Machine operator
Mechanical technology
Merchandising
Music
Nursing
Paint technology
Police training
Radio engineering
Secretarial
Surveying
Western Hemisphere civilization
Window display

Weber College

Business
Shorthand
Typewriting
Retailing
Office machines
Nursing
Trade and industrial education
Air conditioning and refrigeration
Auto body reconditioning
Automotive service and repair
Carpentry
Commercial art
General metals
Machine shop
Power machine operation
Welding

Chapter VI

MAJOR TERMINAL EDUCATIONAL FIELDS*

SOURCES OF INFORMATION. A special *Information Blank* in three sections was sent in the spring of 1940 to all junior colleges (521 in number) except those that stated on the preliminary information blank that they did not wish to participate in the study. Part A, "For the Total Terminal Curriculum," was sent to all of these institutions; Part B, "For the General Cultural Curriculum," and Part C, "For Each Vocational Terminal Curriculum," was sent only to those institutions which reported for *American Junior Colleges*[1] that they gave specific terminal curricula—either general or vocational in character.[2] Useful replies were received from 272 junior colleges.[3] These replies form the basis of the greater part of this chapter, supplemented by information taken from college catalogs and other publications which were sent with the blanks.

Contents of this chapter. This chapter presents (1) an analysis of eight types of vocational terminal curricula and (2) an analysis of the terminal curriculum in the field of "general education." With the offerings in these two types of terminal curricula thus presented, (3) the required nonvocational subjects and (4) the relative proportions of vocational and nonvocational elements in a student's work are then discussed. The chapter closes with (5) a brief presentation of special methods of instruction reported for terminal curricula and with (6) short statements concerning unique features and unusual offerings reported by a dozen junior colleges.

Photographic representation. Activities and methods of instruction in many terminal curricula can be shown better and more quickly grasped visually than through verbal descriptions. Special attention, therefore, is directed to the pictorial supplement of 64 pages at the close of this volume which illustrates all the principal terminal curricular fields in 39 junior colleges, both publicly and privately controlled, in 19 states. All these may be considered as illustrations of the subject matter of this and the preceding chapter, although for convenience and economy they have been placed at the close of the volume.

---

* Max Schiferl collaborated with the author in the preparation of this chapter.

[1] Edited by W. C. Eells and published by the American Council on Education, Washington, D.C., 1940.

[2] For copies of these blanks, see the appendix (pp. 255-61).

[3] For list of these cooperating institutions, see the appendix (pp. 249-52).

Contents of Eight Groups of Vocational Curricula

Information on the courses which make up the curricula of the various fields was obtained from Part C of the Information Blank (Question V) and from catalogs.[4] Both summaries of the number of institutions which offer certain courses in each field and descriptions of the specific courses offered by certain institutions are given below. In making these summaries, it has been necessary in some instances to combine two or more closely related courses under a single designation.

Agriculture. (See also pictorial section, pp. 4A-6A.) Of the 19 institutions for which information is available, 16 offered curricula in general agriculture, two in forestry, and one in floriculture. Eighteen were two-year curricula; one, a course in general agriculture, requires only one year for completion.

The courses offered by the 16 institutions reporting the course-content of agricultural curricula and the number of institutions offering each are as follows:

Horticulture	10	Poultry husbandry	5
Field crops	9	Soils and fertilizers	4
Dairy husbandry	9	Agricultural chemistry	2
Animal husbandry	7	Agricultural surveying	2
Farm management	7	Entomology	2
Farm mechanics	6	Plant pathology	1
Agriculture, introduction to	5	Feeds and feeding	1

The names of the courses indicate the general fields covered, but they conceal differences in emphasis, especially those which provide for special needs of the individual student and the community. For instance, two courses offered at Oceanside-Carlsbad Junior College, California, are classified simply as "horticulture." One, designated in the catalog as "subtropical horticulture," deals with the raising and marketing of such subtropical fruits as avocados, grapes, and olives; the other is designated "citriculture." These specialized courses are, of course, particularly suited to the character of the agricultural industry of this section of Southern California.

---

[4] The latest catalogs available were used. Most of them listed announcements of courses for 1940-41; others, for 1939-40; and a few, for 1938-39.

An example of the combinations of courses included in curricula in agriculture is the following group, offered by Brevard College, North Carolina:

(Numbers indicate semester units)

Dairy cattle and milk production	3	Field crops	3
Poultry production	3	Vegetable production	3
Animal husbandry	3	Farm mechanics	3

Many junior colleges state in their catalogs that the curricula outlined are merely suggestive, and will be altered to fit the needs of individual students. Other institutions do not attempt to organize their offerings into formal curricula. For instance, Phoenix Junior College, Arizona, does not describe its agricultural curriculum in terms of courses but rather in terms of the following major divisions:

Production control
Labor control
Mechanical control
Financial and accounting control
Marketing control
Prevention of loss through pest, disease, disaster, etc.
Agricultural relationships—farm organizations, civic and social obligations, and integration of the industry with other elements of society

Provisions are made for instruction in the production of any specialized commodity in which a number of students are interested.

The terminal forestry curriculum of Boise Junior College, Idaho, includes the following vocational subjects, with quarter units indicated:

Forest trees of Southern Idaho	3	Forest nursery practice	3
Silviculture	4	Soils	4
Mensuration	4	Protection—pests and diseases	3
General forestry	3	Fish and game	2
Protection—fire	3	Technical and monthly reports	1
Range management	5		

The greenhouse practice curriculum offered by North Dakota School of Forestry consists of the following courses with quarter units indicated:

Botany	12	Plant materials	3
Elementary greenhouse practice	19	Floral design	2
Advance greenhouse practice	19	Elementary landscape gardening	3
Nursery practice	2	Greenhouse drawing	3

This curriculum is intended both to train greenhouse assistants and to prepare students as greenhouse managers. In addition to the courses listed above, the following business courses are required:

Accounting	3	Commercial correspondence	3
Business law	4	Business organization	4
Typewriting	6	Business mathematics	3

Business. (See also pictorial section, pp. 7A-14A.) Two hundred curricula in the business field were reported by 136 junior colleges. Two years are required to complete 183 of the curricula, one year to complete 7, and either one or two years to complete 10. The following curricula were reported by the number of institutions indicated:

General business	96	Merchandising	5
Secretarial	79	Banking	3
Accounting	8	Management	1
Salesmanship	7	Business law	1

The courses offered in connection with these curricula, reported by 131 institutions, and the number of institutions offering each are as follows:

Accounting or bookkeeping	123	Filing and indexing	25
Stenography	123	Advertising	21
Typewriting	122	Penmanship and spelling	19
Commercial law	91	Introduction to business[7]	18
Office practice	75	Business statistics	12
Business English	64	Personal development and office etiquette	10
Business arithmetic	47	Credits and collections	7
Salesmanship[6]	46	Investment	6
Office machines	36	Insurance	4
Money and banking	29	Real estate	4
Secretarial problems[5]	26	Stenotype	3
Marketing[6]	29	Apartment house management	1
Business organization and management[7]	26	Switchboard operation	1
Retail merchandising[6]	24		

Attention should be called to the large number of courses in "personal typewriting," given in business departments for students registered in other curricula, and to the fact that a number of institutions offer courses in consumer education in conjunction with business curricula.[8]

Examples of the groups of vocational courses which are included in business curricula are afforded by the secretarial curricula of Joplin Junior College, Missouri. Two secretarial curricula are offered by this institution, one for students who have had two years of high school commercial work or its equivalent, and another for students who have had no such previous training. The subjects included in each curriculum and the number of semester units required in each subject are as follows:

---

[5] Theoretical rather than practice courses are included under this heading.

[6] Retail merchandising is a general course which covers all problems of the owner or manager of a retail store. Salesmanship is restricted to problems of selling, and marketing, to problems in buying.

[7] Introduction to business is a general survey course; business organization and management is restricted to a review of the structure of business organizations and to problems in management.

[8] For further consideration of courses in consumer education, see page 88.

Subjects	*For beginning students*	*For advanced students*
Shorthand	14	6
Introduction to business	2	2
Typewriting	9	3
Business arithmetic	3	3
Secretarial typewriting	2	4
Office practice	–	3
Business law	–	3
Accounting	6	–

Electives for both groups include salesmanship, advertising, business organization and management, and mercantile organization and credits.

Many of the curricula entitled "general business" and "business administration" are similar to secretarial curricula. Others do not include secretarial courses. For instance, the curriculum in business administration offered by Hillyer Junior College, Connecticut, consists of the following business subjects:

Introductory accounting
Business letters and reports
Principles of modern business
Principles of marketing
Business law
Corporation finance
Factory and office management
Advertising and market research
Business statistics and forecasting
Salesmanship and sales administration
Money and banking

The accounting curriculum of Bay City Junior College, Michigan, includes the following courses with semester units indicated:

Accounting	12	Banking and finance	3
Business organization	6	Business law	3

The banking and finance curriculum of the Chicago public junior colleges includes the following vocational courses, with semester units indicated:

Accounting	9	Business law	6
Business mathematics	3	Introduction to finance	3
Money and banking	3	Banking practice	3

The San Francisco Junior College curriculum in insurance involves these specialized courses:

Insurance practice
Principles of insurance
Life insurance
Casualty insurance
Fire insurance
Consumer insurance

The merchandising curriculum of Fullerton Junior College, California, contains the following vocational courses, with semester units indicated:

Retail selling	3
Retail advertising	3
Business mathematics	3
Business English	3
Business correspondence	3
Typing	6
Personal development	2
Principles of merchandising	3
Accounting	6
Design and color	2
Textile study	2
Credit and installment buying	3
Personal finance	3

This curriculum is intended to prepare students for retail store work and is designed to meet the demands of large organizations, as well as to prepare for store management and ownership.

Engineering and technology. (See also pictorial section, pp. 14A-30A.) Descriptions of 83 curricula in the field of engineering and technology were given by 44 junior colleges. Seventy-eight of the curricula require two years to complete, four require one year, and one requires three years. The following curricula were reported by the number of institutions indicated:

General engineering	22
Aviation	13
Mechanical engineering	9
Electrical engineering	8
Auto mechanics	6
Radio engineering	6
Chemical engineering	5
Building trades	4
Civil engineering	2
Oil technology	2
Agricultural engineering	1
Air conditioning	1
Art metal	1
Drafting	1
Mining	1
Welding	1

The courses offered in connection with these curricula by 42 institutions, and the number of institutions offering each, are as follows:

Drafting

Engineering drawing	23
Descriptive geometry	15
Machine drawing	10
Mechanical drawing	10
Architectural drafting	9
Aviation drafting	8
Electrical engineering drafting	3
Civil engineering drafting	2

Shop (Excluding aviation)

Machine shop	19
Woodwork and carpentry	18
Auto mechanics	14
Welding	13
Pattern-making	8
Art metal	1
Foundry	1

Aviation

General theory	13
Mechanics	10
Motors and structures	7
Flight training	4

Others

Electricity	15
Engineering principles	12
Surveying	12
Mathematics, general	10
Engineering materials	9
Radio engineering	9
Air conditioning and refrigeration	7
Gas and diesel engines	7
Chemistry	6
Engineering mechanisms	5

Metal working, principles	3
Printing	3
Geology	2
Graphic analysis	2
Kinematics	2
Mechanical engineering	2
Mining and assaying	2
Petroleum development and production methods	2
Hydraulics	1
Knitting and textiles	1
Mineralogy	1
Plumbing	1

Most of the curricula in engineering are built around shop courses of two or more semesters in length. One system of combining the shop practice work with the related subjects is that of the state junior colleges of Utah. The curriculum in auto mechanics offered by Carbon College consists of six quarters of shop practice in all branches of automotive service and repair, for which 30 quarter units of credit are granted. This is supplemented by six quarters of "trade technical" study, carrying 24 units of credit, intended to supply the information necessary for a full understanding of automotive work. The work of each quarter also includes five units of "trade related" work covering a number of subjects which do not bear directly on the performance of shop tasks but which enable the student to take a more responsible part in his chosen field. It includes studies in industrial history and labor problems, trade codes, vocational English, and trade mathematics. Similar curricula are offered in carpentry, machine shop, and welding.

The curriculum in petroleum technology given at the Coalinga Extension Center, California, includes the following subjects:

Engineering fundamentals
Petroleum chemistry
General geology
Engineering drawing
Petroleum geology
Oilfield mathematics
Oilfield shop
Surveying
Field trips (technical reports of trips to natural gas plants, refineries, wells, etc.)
Electric power
Gas engines
Industrial instruments

Some junior colleges offer specialized courses in a number of closely related fields. For instance, Modesto Junior College, California, offers 27 semester units of work in airplane engine maintenance and repair, 31 units in airplane fabrication, and 32 units in airplane drafting.

Programs in aviation flight training are governed by Civil Aeronautics Authority regulations. The primary training course consists of a 72-hour[9] ground course and 36 to 45 hours of flight instruction. The ground instruction is divided equally between work in navigation, meteorology, and civil air regulations. Flight periods vary from

---

[9] All "hours" in this paragraph refer to clock hours of instruction not to semester hours of credit.

30 to 60 minutes and cannot exceed two per day. The secondary or advanced course consists of 126 hours of ground school instruction and 40 to 50 hours of flight instruction. The ground instruction consists of study of aircraft, 36 hours; navigation, 24 hours; power plants, 48 hours; and aircraft operation, 18 hours.

New Haven Y.M.C.A. Junior College, Connecticut, offers curricula in electrical engineering, mechanical engineering, and building and construction engineering. A number of the courses offered in connection with these curricula are required for all three programs and are taken by all students during the first year. The second year is spent on specialized subjects in the major field. For instance, the curriculum in building construction includes courses in architectural drawing, architectural design, building equipment, and building construction.

A number of the technical training courses offered do not appear to be planned specifically for students enrolled in curricula in a specialized field. Rather, many are well suited for students whose interest in the technical field is of an avocational rather than a vocational sort. For instance, the following industrial arts courses offered by Chanute Junior College, Kansas, carry only two or three hours of credit each: applied art (pottery), auto mechanics, automotive electricity, arc welding, bench woodworking, and art metal.

The curriculum in industrial art offered by John Tarleton Agricultural College, Texas, is intended to prepare students for a teaching certificate. It includes the following courses:

Wood turning
Bench woodwork
Mechanical drawing
Industrial arts, general
Cabinet making
Elementary methods in education
Major sports
Electric wiring and repair
Care of shop equipment
Methods in teaching
Wood finishing
Methods of rural high school administration
Free hand drawing

Fine arts. (See also pictorial section, pp. 31A-48A.) Sixty-seven curricula in fine arts were reported by 39 institutions. Sixty-four of the curricula required two years to complete, two required one year, and one required three years. The following curricula were reported by the number of institutions indicated:

Art	29
Music	22
Drama and speech	8
Photography	3
Architecture	2
Costume design	2
Interior decoration	1

The courses offered in connection with these curricula, and the number of institutions offering each, are as follows:

Art, interior decoration, costume design

History and appreciation of art	26
Art, general (laboratory)	24
Costume design	20
Interior decoration	17
Commercial art	16
Design and color	14
Crafts	11
Stagecraft	6
Advertising art	5
Lettering	5
Landscaping	3
Architectural drawing	2
Graphic art	2
Public school art	2
Instrumental drawing	1
Bookbinding	1
Caricaturing	1

Music

Harmony	19
History and appreciation	18
Voice	17
Piano	16
Violin	13
Sight singing and ear training	12
Fundamentals of music	9
Orchestra	9
Chorus	8
Organ	8
Ensemble	7
Band	6
A Cappella choir	5
Brass and woodwind	5
Conducting, composing, and arranging	5
Public school music	5
Counterpoint	3
Harp	1

Drama and speech

Dramatic art	8
Speech fundamentals	7
Oral interpretation	6
Public speaking	5
Choral speaking	2
Debate	2
Dialects	2
Drama, history and appreciation	1
Modern dance	1
Play production and direction	1

Photography

Photography	5
Cinematography	1

The curricula in art at Sacramento Junior College, California, include six majors: general art, drawing, design, crafts, commercial art, and home arts. The subjects required for these programs include:

Art structure
Design
Representation
Appreciation of art
Crafts
History of art
Figure drawing
Commercial art
Anatomy
Outdoor sketching
Painting (water color)
Costume design
Illustration
Commercial design
Drawing
Interior decoration

Many of the curricula in music are not outlined in terms of courses and semester hours credit, since rates of advancement are not uniform. The department of music at Andrew College, Georgia, offers complete courses in piano, violin, voice, harmony, counterpoint, composition, history of music, and theory. Instruction is given in both private and class lessons. A music curriculum which places more emphasis on appreciation is that of Little Rock Junior College, Arkansas. It includes the following courses:

Appreciation of symphonies and operas
Radio music
Sight singing and ear training
Music appreciation
History of music
Elementary harmony
Advanced harmony
Piano
Chorus
Public school music
Composer's course (noncredit)

The curriculum in theatre arts of Finch Junior College, New York, is described as primarily a nonvocational course. According to the catalog, "the purpose of this course is to use the study of the drama as a means to nourish the imaginative life, to create a social laboratory wherein the student is stimulated to release hidden capacities and enrich her understanding of herself and her fellow human beings." Courses in play production are offered in connection with which detached scenes, one-act plays, and several major productions are presented and a basic knowledge of stagecraft imparted. As part of the second-year's work each student is required to design and direct a one-act play. Finch Junior College also offers a four-semester sequence in modern dance.

Required courses of the arts and crafts curriculum of Westbrook Junior College, Maine, with number of semester hours indicated, include:

Color and design	3	Metal craft	6
General craft work	6	Research	6

Electives include:

History of art
Clothing construction
Advanced craft work
Applied design
Interior decoration
Drawing and painting

The curriculum in photography at Stoneleigh College, New Hampshire, includes a two-semester sequence in fundamentals of photography, and four-semester sequences in laboratory techniques and applied photography.

Health services. (See also pictorial section, pp. 49A-54A.) Curricula in the general field of health were reported by 28 institutions, including 31 separate curricula. The length of time required to complete these curricula is as follows:

Number of years	*Number of curricula*
1	4
2	19
1 or 2	4
3	3
2 or 3	1

The following curricula were reported by the number of institutions indicated:

Medical-secretarial and dental assistants	16	Physical therapy	1
Nursing	13	Public health sanitation and civic health	1

The courses offered in connection with these curricula by 25 institutions, and the number of institutions offering each, are as follows:

Biological and medical courses

Chemistry	17
Bacteriology	13
Physiology and hygiene	12
Anatomy	10
Biology	9
Foods and nutrition	8
Laboratory methods	8
Psychology	7
Zoology	6
First aid and practical nursing	5
Survey of medical science	4
Medical ethics	3
Nursing	3
Dental techniques	2
Hospital apprenticeship	2
Histology	1
Physical therapy	1
Case history recording	1
X-ray technique	1
Public sanitation	1
Drugs and solutions	1

Secretarial and legal courses

Shorthand	15
Typing	15
Bookkeeping and accounting	12
Office training	12
Medical terminology and dictation	8
Business English	6
Civic health administration	1
Mathematics for nurses	1
Public health law	1
Penmanship	1

Medical-secretarial curricula are intended to equip graduates to serve as assistants in the offices of physicians, surgeons, or dentists, and in some instances to serve as laboratory technicians and hospital record librarians. The vocational courses include both biological and secretarial subjects. For instance, the curriculum offered by Scranton-Keystone Junior College, Pennsylvania, includes the following vocational subjects, with semester units indicated:

Elementary chemistry	6
Biology	8
Typewriting	6
Shorthand	9
Medical ethics and office procedures	2
Bacteriology	4
Clinical laboratory procedures	4
Business correspondence	3
Secretarial procedures	4
Medical accounting	3
Medical shorthand	2
Medical typewriting	2
Home hygiene and practical nursing	1
Psychology for nurses	3

The names of the courses indicate those that were developed especially for students enrolled in health curricula. In addition, the chemistry course was designed especially for medical-secretarial and arts students and differs from that given to prospective transfer students.

There is some question concerning the terminal nature of many of the nursing curricula. Nursing curricula in some junior colleges are intended as preliminary to hospital training. In some instances the junior college cooperates closely with a local hospital in this training. For instance, at Scottsbluff Junior College, Nebraska, the junior college gives special courses for nurses in chemistry, psychology, sociology, and microbiology. The hospital training school supplies the remainder of the necessary training. Similarly, at Ottumwa Heights

College, Iowa, the college is affiliated with the local St. Joseph Hospital. Students taking the three-year nurses' training course at the hospital enroll in the junior college courses in anatomy and physiology, bacteriology, chemistry for nurses, cookery and dietetics, and pathology.

The curriculum in public health sanitation of Los Angeles City College provides both in-service training to those already employed in the field and preparation for positions as sanitary assistants. Courses include:

Elementary and advanced sanitation
Bacteriology
Chemistry
Civic health administration
Civic health field training
Chemistry of food
Health development
Public health law

A curriculum in physical therapy is offered by the Junior College of Physical Therapy, Connecticut, a junior college which specializes in training for this field.

Home Economics. (See also pictorial section, pp. 54A-59A.) Descriptions of home economics curricula were received from 37 institutions. All but one of the curricula described require two years to complete. Courses offered in connection with these curricula and the number of institutions offering each are as follows:

Foods and cooking	33	Child psychology	5
Clothing and textiles	29	Consumer problems	5
Household management	24	Family finance	5
Home furnishings and decoration	17	Household equipment	5
Nutrition and dietetics	14	Introduction to home economics	4
Family relationships	13	Marketing	3
Child care	11	Children's literature	2
Costume design	11	Household science	2
Home nursing	10	Handicrafts	1
Sewing	9	Institutional management	1
Home planning	7	Social recreation	1

The home economics courses offered by Pine Manor Junior College, Massachusetts, include:

Clothing, fundamental principles
Social economics
Foods
Household science
Nutrition
Dressmaking and design
Family relationships
Principles of design
House building and home furnishing
Household technology
Home management
Home management house (residence in model cottage)

At Christian College, Missouri, the curriculum intended to prepare for life and marriage emphasizes courses in hygiene, child care, and marriage problems.

The curriculum in this field at Colby Junior College, New Hampshire, is entitled "family relationships." Part of the year's work of this curriculum is the preparation of a symposium on some phase of American life pertaining to the family. The resulting volume is presented in bound form to the college library as the product of the research and study of the class.

Journalism. Descriptions of journalism curricula were received from 12 institutions. All but one of the curricula require two years for completion. The courses offered and the number of institutions offering each are:

Principles of journalism	9
Editorial, feature, and newswriting	8
Copy reading and editing	5
History and ethics of journalism	3
Interpretation of news, propaganda	3
Newspaper organization and management	3
Reporting	3
Community journalism	2
Publicity stories	2
Dramatic criticism	1
Foreign correspondence	1
Newspaper field work	1

The courses in journalism offered by the Junior College of the University of Baltimore, Maryland, with semester units indicated, are:

Effective writing	4
Principles of journalism	4
Editorial and feature writing	4
Dramatic criticism	2
Foreign correspondence	2
History and ethics of journalism	2
Reporting	2

Most of the junior colleges reporting journalism curricula appear to offer only two or three courses in journalism, and to depend on courses in English and work on the college paper and other student publications to provide additional training.

The consumer journalism curriculum offered by Long Beach Junior College, California, is intended primarily for readers of newspapers. It is also useful for students who expect to enter publicity work.

Public Service. (See also pictorial section, pp. 59A-63A.) Descriptions of public service curricula were received from 54 institutions. These institutions reported 56 curricula in the field. Two years are required to complete 53 of the curricula, one year to complete one, and either one or two years to complete two. The following curricula were reported by the number of institutions indicated:

Teaching	45
Physical education	5
Recreational leadership	3
Library aides	1
Peace officers	1
Social service	1

The courses offered in connection with the teaching and physical education curricula and the number of institutions offering each are as follows:

Methods of teaching	35
Supervised teaching	30
Educational psychology	29
Introduction to education	29
School art	25
School music	25
Teaching of reading	19
School organization and management	17
Health and physical education	13
Playground supervision	13
Children's literature	11
Child psychology	10
Observation and participation	9
Educational tests and measurements	8
Teaching of arithmetic	6
Industrial arts	5
Teaching of geography	5
Coaching	4
Language arts	4
Teaching of penmanship	4
Curriculum building	3
Educational history and trends	3
Story telling	3
Elementary subjects review	2
Teaching of religion	2
State school law	1

The courses in teaching and in physical education which are offered by most institutions are determined by state certification requirements. Unpublished data furnished by the United States Office of Education for 1938-39 show that at least 228 junior colleges were approved by state departments of education for the education of teachers. These institutions were distributed as follows: state controlled, 19; city or district controlled, 73; privately or denominationally controlled, 136.

The recreational leadership curricula of three California public junior colleges include the following courses:

Principles of community recreation
Technique of teaching social and recreational games
Leadership
First aid
Dramatics
Handicrafts
Health education

Students enrolled in recreational leadership are advised to participate in athletics, and women students are advised to engage in social activities.

The curriculum in social service offered by Fairmont Junior College, Washington, D.C., includes two four-semester unit courses in social service. The first covers a variety of social problems; the second, the making of case records, the study of occupational therapy, school visiting, and nursing. Students carry on active projects in cooperation with local social agencies. Also courses in sociology and economics are given.

The vocational courses offered in the library aides curriculum of Los Angeles City College, California, include: catalog cards and call numbers, library routines, use of reference books, clerical aide practice. Courses in typing, office methods, and stenography also are given.

The vocational courses of the peace officers curriculum of Los Angeles City College, with number of semester units indicated, are:

Law, contracts, and sales	3	Criminal procedure	3
First aid	1	Advanced criminal law	3
Real estate and property law	3	Criminal evidence	3
Criminal law	3	Automobile law	1
Police science (chemistry)	3		

Miscellaneous. (See also pictorial section, p. 64A.) Miscellaneous terminal curricula reported include such diverse fields as cosmetology, mortuary science, printing, wildlife management, laundry management, and training of travel agents.[10]

General Terminal Curricula

One hundred and forty-six junior colleges reported that they offer a terminal curriculum of a general cultural or social intelligence type, designed primarily for students who do not expect to continue their formal education but who are not interested in vocational preparation. Enrollment reported in these curricula was in excess of 6,000 students. The need for such a curriculum, particularly in colleges for women, was discussed by President Burk, of Ward-Belmont School, at the 1939 meeting of the American Association of Junior Colleges.[11]

Information blanks, Part B, were received from 80 junior colleges, 46 publicly controlled, 34 privately controlled.[12] The first part of this section is based upon the information furnished on these blanks.

Core curriculum. The first question on this blank read: "Is there a single 'core curriculum' or group of courses or subjects required of all students in this [the general terminal] curriculum?"

In the majority of cases this central group of requirements is the same for terminal and transfer students. In many institutions no difference is made in the work taken by the two groups. In general the most common requirement is English, social studies (government, economics, or history), hygiene, and physical education. Less frequently, orientation, physical science, mathematics, modern languages, and Bible or religion (in denominational institutions) are included in this core group. Occasionally are found also library science, world literature, human biology, art appreciation, consumer education, ethics, Pan-American relations, and current events.

---

[10] For references to articles concerning these fields see L. E. Engleman and W. C. Eells, *The Literature of Junior College Terminal Education*, American Association of Junior Colleges, Washington, D.C., 1941, references 1353-58.

[11] J. E. Burk, "Cultural Curriculum at Ward-Belmont," *Junior College Journal* (May 1939), 9:486-87.

[12] See the appendix (page 259) for copy of this blank.

Most public junior colleges in California require 10 or 12 semester units of English (including speech), American institutions, hygiene, and physical education. Morris Junior College, New Jersey, has a core curriculum consisting of 20 hours of English composition, literature, speech, science survey, history, politics, etiquette, and dramatics. Mount Aloysius Junior College, Pennsylvania, required for the general terminal curriculum 40 hours in English, life psychology, present day literature, recreational education, Pennsylvania commonwealth, euthenics, and American nation. St. Mary's Female Seminary Junior College, Maryland, requires 15 hours in English composition, speech, personal and community health, physical education, art appreciation, music appreciation, and Bible appreciation.

Following is the general cultural curriculum as outlined at Ward-Belmont School, Tennessee, with semester hours as indicated:

First year		*Second year*	
English composition	6	English literature, or American literature, or Shakespeare and modern drama	6
History or social science	6	Laboratory science	8
Physical education	20	A continuation course	6 or 8
Elective	18	Physical education	2
		Electives	12 or 10

A special faculty committee at Ward-Belmont, appointed in 1931, worked on the problem of a suitable general cultural curriculum, arriving at that outlined above after full consideration and six years of experimentation. The theory back of this curriculum is thus stated by the committee:

> A curriculum to be considered "social" (1) must provide opportunity to become better acquainted with humanity's political and civic past; (2) must give some insight into methods of thinking whereby mankind has made such great strides in recent years; and (3) must allow a wide range of elective studies to meet the problem of individual differences.

Survey courses. Two questions were asked concerning survey courses: "Are any survey courses given? If so, in what fields?" No definition of "survey course" was offered and evidently the term is not used in the same sense in all institutions.

Less than half of the 46 public junior colleges claimed to be giving any type of survey courses, but more than four-fifths of the private institutions were doing so. A survey in the social sciences or contemporary civilization was mentioned most frequently, by 15 junior colleges. Others reported, with frequencies, were English literature, 13; science, 11; biological science or life science, 10; physical science, 8; history, 7; humanities, 6; art, 3; and American family, home economics, study techniques, survey of shop courses, and orientation, 1 each.

There is considerable interest in the field of survey courses, particularly for terminal students, but the work is still largely in the experimental stage. A comment from a western institution, which is giving survey courses in humanities and the social sciences, is typical of the feeling in many quarters: "We are not satisfied with either—are reorganizing now—not sure just what we will do in the fall." The most extensive experimentation is probably that being carried on in the Chicago junior colleges in the physical science, biological science, social science, and humanities fields.

Separation of students. Question IV read: "To what extent, if at all, are students enrolled in this [general terminal] curriculum placed in classrooms separate from transfer students taking the same courses?"

Of 80 institutions which replied to this question, complete separation was reported in only two institutions, a considerable degree of separation in three institutions, and separation in one or two courses only (most frequently English) in eight institutions. Thus there was a total of only 13 of the 80 junior colleges in which some degree of physical separation is practiced.

Two questions were asked regarding differentiation of work for terminal and preparatory students: "If taught in the same classes, is there any differentiation of work for the two groups?" "To what extent do you differentiate the method or content or both of courses in English, mathematics, science, social studies, languages, etc., for transfer and for terminal groups of students?"

Almost half of the institutions reported some differentiation, but in most cases it is not great. Frequently it is limited to different amount or character of assigned reading, class papers, or standards of grading. The terminal students are likely to be given projects or other assignments which are somewhat more practical in nature. Differentiation, for the most part, seems to be on an individual basis. One institution, reporting in the negative, said: "There is none—we are under local university control which does not approve such a plan of differentiation!"

Half of those who make no differentiation stated that they believed some differentiation should be made, most frequently on an individual basis, taking into account individual ability and interest. Several stated that it is not feasible at present, because of budgetary and organization difficulties, but that it is desirable. Only two thought that there should be a decided or marked difference. One said: "This is a big problem, and I am unable to say for sure. We have tried both plans, but at this time have no differentiation." Another wrote: "A moot question. Our present experience leads us to think that such differentiation is unnecessary." One made the unequivocal statement, "Absolutely important—the terminal group cannot be placed successfully with other groups."

Special features. The final item on the blank was: "Please describe as fully as feasible any special features or unique methods involved in this curriculum which are not adequately reported above." Replies to this question yielded no significant results, but served only to emphasize further the experimental nature of the work at the present time. Typical answers follow: "We are working on the problem." "Still in experimental stage." "Our work in this field is experimental and there is no need to burden you with our trials and tribulations at this point." But the viewpoint of many is expressed by one dean who wrote: "I believe it is for the junior college to develop a program to meet the needs of youth, and I hold that every youth is entitled to as much education as he can profitably absorb."

Consumer education. A general cultural field of increasing interest and importance in junior colleges in the past few years has been that of consumer education. Education for more intelligent purchasing and consumption may be considered a highly desirable if not essential part of a curriculum for social intelligence or of any semiprofessional or other type of terminal curriculum designed to prepare young people for life.

Outstanding research work in this field has been carried on for several years by the Institute for Consumer Education at Stephens College, Missouri, supported in large part by generous grants from the Alfred P. Sloan Foundation.

The American Association of Junior Colleges has a special committee[13] working on plans for a more extensive study of many phases of consumer education, particularly as they affect junior colleges;

---

[13] William H. Conley, Wright Junior College, Chicago, chairman.

hence no extended treatment will be given here. The following 35 junior colleges (23 public, 12 private) reported on Part A of the *Information Blank* that they gave a regularly scheduled course in consumer education in 1939-40, with the enrollments indicated.

Arizona	
Gila Junior College	18
Phoenix Junior College	90
Arkansas	
Central College	30
State A. & M. College	75
California	
Coalinga Extension Center	14
Fullerton Junior College	246
Glendale Junior College	164
Long Beach Junior College	40
Modesto Junior College	54
Oceanside-Carlsbad Junior College	9
Pasadena Junior College	516
Salinas Junior College	57
Salinas Evening Junior College	12
San Mateo Junior College	173
Stockton Junior College	90
Yuba County Junior College	30
Colorado	
Colorado Woman's College	24
Pueblo County Junior College	30
Connecticut	
Hillyer Junior College	75
Kansas	
Dodge City Junior College	25
Maine	
Portland Junior College	6
Massachusetts	
Garland School	18
Pine Manor Junior College	21
Michigan	
Jackson Junior College	14
Minnesota	
Tracy Junior College	20
Missouri	
Stephens College	167
Montana	
Billings Polytechnic Institute	8
New Hampshire	
Stoneleigh College	34
New Jersey	
Morris Junior College	9
New Mexico	
Eastern New Mexico College	100
Oklahoma	
University Preparatory School & Junior College	25
Pennsylvania	
Hershey Junior College	16
Tennessee	
Southern Junior College	12
Utah	
Weber College	29
Vermont	
Green Mountain Junior College	22
	2,273

A total of 39 institutions (including 14 of those listed above) reported 72 courses which include systematic consideration of consumer problems with a total enrollment of 8,803 students (7,794 public; 1,009 private).

Required Nonvocational Subjects

Question VI of Form C of the Information Blank read: "In what way, if at all, does the program of required general or nonvocational subjects differ from the conventional liberal arts or preprofessional program? (Different standards, content, organization, survey courses, etc.)" Only 35 institutions reported that the nonvocational program required for terminal students differed significantly from that required for liberal arts or preprofessional students.

Many institutions reported the offering of survey courses. The nature of the survey courses offered is illustrated by those developed by the three public junior colleges of Chicago.[14]

> *Biological Science.* The survey course in biological science aims (1) to give an integrated understanding of the living world; (2) to give an appreciation of scientific principles as they are evidenced in life; and (3) to provide a background which will be at once the foundation for those who wish to pursue the subject further, and which will permit a fuller life for those who will not take additional work in the field.
>
> *Physical Science.* The physical science survey course has been planned and developed in the belief that science may be made accessible to the nonspecialist and that its achievements may be shared by him. It is primarily for this type of student that the course is given, although the specialist will find it an overview of the entire field. The year-course covers certain aspects of the sciences of astronomy, chemistry, geology, and physics. The objectives of the course are as follows: (1) to acquaint the individual with some of the facts and laws of the physical world and their relation to his life and to modern society; that is, as a part of general education; (2) to furnish training in scientific method and practice by study of the development of some of the great theories of physical science; and (3) to cultivate a point of view and a philosophy toward natural events.
>
> *Social Science.* The aims of the survey course in social science are: (1) To give an integrated picture of the social world through a study of economic, political, and social problems; (2) to develop more effective and articulate citizenship; and (3) to provide a background for those who expect to do advanced work in the field.
>
> *Humanities.* The humanities survey purports to give a synthesis of Occidental culture in its manifestations of art, literature, history, philosophy, and religion. Its objective is to develop a sense of cultural values in the student. It also seeks to establish a background for the study of contemporary culture by presenting the masterpieces or monuments of the humanities of the past. As a study in the junior colleges it is designed to serve two classes of students. It is planned as a humanizing activity for the student who pursues a general education and who will probably terminate his scholastic training upon graduation from the junior college. On the other hand it is also planned as an introductory course for those who aim to specialize in any one of the humanities. In spite of its introductory or general nature the humanities survey deals almost exclusively with sources which are studied or read by the student in the light of

---

[14] For further information on the curricula of the Chicago junior colleges, see Chap. XIV, pp. 169, 172-3.

interpretative lectures presented by the faculty or by an occasional guest speaker.

These survey courses, together with six hours of English, are required of all students. They take half of the time of the student (30 semester hours) the other half being available for semiprofessional work.

A number of institutions have developed special courses in several subjects to meet the needs of terminal students. Bay City Junior College, Michigan, offers two three-semester-hour courses in remedial college reading which affords credit for graduation but not for transfer, a special course in problems of American citizenship, courses in applied psychology described as "a study of effective methods of work and other factors essential for a successful college career," and a terminal course in popular public speaking. Sacramento Junior College, California, has developed a course entitled "speech for business," which is described in this way: "Theory of speech composition and delivery with particular emphasis on speech requirements in business, such as making committee and business reports, presiding at business meetings, writing and reading minutes, and further emphasis on the practical aspects of speech presentation."

The nonvocational work of the vocational curricula offered by the public junior colleges of Utah is given in the form of a sequence of "trade related" courses. The trade related work for the curriculum in carpentry is described as "a course covering the necessary related information needed by a learner to become a first-class workman eligible to enter the trade as an advanced apprentice. The work includes trade codes, steel square, labor problems, light frame construction, blueprint reading, employer-employee relations, and other trade information."

Glendale Junior College, California, allows terminal students to satisfy the English requirement by courses in commercial English, or in special courses in literature. Terminal students also enroll in a course in American political ideals which differs in content, standards, and organization from the course in the same subject required of preparatory students.

The nonvocational program of Antelope Valley Junior College, California, places more emphasis on avocational interests—in art, music, photography, and cinematography.

The courses in economics and social problems which are taken by terminal students of New Haven YMCA Junior College, Connecticut, stress problems that will be met in business and community activities.

A large number of institutions offer courses in business English and correspondence, and in personal development or personal efficiency.

Occasionally special courses in the academic fields are offered for terminal students, particularly in the larger junior colleges. Such courses are found in psychology, philosophy, English, economics, government, and science. In the smaller junior colleges separate classes are not common, but modifications are made to fit special needs. Needed flexibility is introduced by variation in number and character of special reports, supplementary reading, field trips, visual aid materials, less individual laboratory work, and more practical applications for students enrolled in terminal curricula.

In many cases instructors state that absolutely no differentiation is made in content and organization of courses or in character and standards of work. In others it is frankly stated that standards of work and levels of grading are different for terminal students. In Wright Junior College, Chicago, grades of A, B, or C are required for transfer students, while D grades are acceptable for terminal students. One instructor remarks, "Not so high academic standards are required for terminal students although they are often attained."

Percentage Composition of Terminal Curricula

What proportion of the courses taken by a student enrolled in a terminal curriculum should be technical or vocational and what proportion general or cultural? What part should consist of courses designed primarily to enable the student to earn a better living? What part should consist of courses designed primarily to enable him to live a better life? There is no simple and unique answer to these important questions. Perhaps there should be no one answer for all institutions, for all curricula, and for all students.

It is quite clear, however, that a course which is really *semiprofessional* in nature must endeavor to provide something more than mere techniques and skills, important as they are. It must provide also elements designed to develop a more cultured individual, a better member of society, a more intelligent citizen. Just how much time can be devoted to these two diverse but related objectives in a necessarily brief two-year junior college curriculum has not been determined. It is an important subject for further study and experimentation. Some discussions of the philosophy and significance of this dual nature of a well-organized terminal curriculum will be found in the third monograph of this series, *Why Junior College Terminal Education?*

The purpose in this chapter is not to discuss the theory or need for such division of time and emphasis, but instead to report the actual conditions as found in the junior colleges of the country at the present time. A consideration of present conditions may well form a significant factual background for subsequent discussion and experimentation.

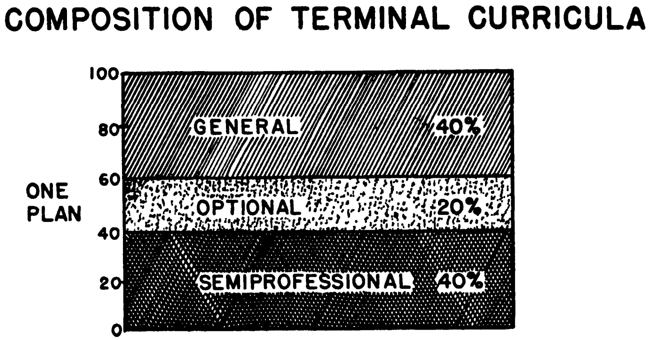


Figure 22. Prescribed Distribution of Courses in Terminal Curricula at Los Angeles City College and in Accreditation Standards of State of Maryland

In order to secure definite information, each institution was asked to report for each terminal curriculum offered the percentages of the total time devoted to required courses in the vocational field, required courses in the nonvocational field, and optional courses in either field.[15]

Wide publicity has been given to the principle that has been in force for some years at Los Angeles City College for all of the numerous semiprofessional curricula for which that junior college has become so well known throughout the country. The general requirement is that at least 40 per cent of the curriculum must consist of vocational, technical, or "skill" courses, 40 per cent must consist of general, cultural, or "vision" courses, while the remaining 20 per cent is left optional to meet the special needs and tastes of the individual students. This distribution is illustrated in Figure 22. Incidentally it is interesting to observe that this same distribution has been specified in the accreditation standards for junior colleges adopted in 1939 by the Maryland State Department of Education.[16] Whether it is wise without further experimentation and consideration to "freeze" such a distribution in state standards may be questioned.

---

[15] See Part C, question IV, page 260. An unfortunate typographical error in printing the blank caused some confusion in this question, which was adjusted as far as possible by a supplementary letter. In a few cases, however, it was necessary to discard the answers to this question on account of this error.

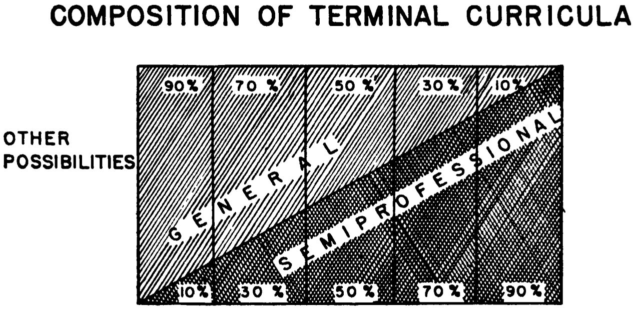


Figure 23. Possible Variations in Distribution of Vocational and General Elements in Terminal Curricula

Many variations from the Los Angeles 40-20-40 pattern, however, are found. The possibilities of such variation are illustrated in Figure 23. That these hypothetical variations are not fictitious is shown by a consideration of the answers received concerning 336 different semiprofessional curricula. The composition of these curricula is summarized in Table X.

Table X. Composition of 336 Junior College Curricula

Per cent	Vocational	General	Optional
Medians	**51.5%**	**28.6%**	**14.6%**
100	6	—	—
90–99	3	1	—
80–89	23	2	1
70–79	31	6	3
60–69	50	15	4
50–59	69	32	17
40–49	52	52	20
30–39	58	53	33
20–29	25	81	53
10–19	11	66	75
0–9	8	28	130

---

[16] See above, page 43.

Each column of Table X must be read independently since obviously all columns do not refer to the same curricula. Thus there are six curricula in which all of the content (100 per cent) is required to be vocational in character. Similarly there are three curricula in which 90 to 99 per cent of the content is required vocational, while there is one curriculum (obviously not one of the same three) in which 90 to 99 per cent of the work is required to be general in character. In the same way there are 23 curricula in which required vocational courses comprise 80 to 89 per cent of the total, two other curricula in which the same proportion must be general in type, and one curriculum in which the same proportion is left optional.

Table X exhibits as wide divergence in practice as illustrated by the hypothetical distributions of general and technical elements shown in Figure 23. Required elements of vocational curricula vary from eight in which the proportion is less than 10 per cent, to six in which all of the curriculum is of a required vocational character. The median figure, which may be taken as somewhat representative, is 51.5 per cent. It may be noted, too, that slightly more than half of the curricula studied are found between the limits of 40 and 60 per cent of required vocational courses—approximately 10 per cent on either side of the median.

In a similar manner, required "general" content varies almost as widely, but with a median figure much lower, slightly below 30 per cent. More than half of the curricula studied are found between the limits of 20 and 40 per cent—approximately 10 per cent on either side of the median.

In general, almost twice as much work is required in the vocational field as in the general field. Little provision for flexibility is found. In about two-fifths of the cases less than 10 per cent of the curriculum is subject to individual election. In almost two-thirds of the cases optional courses constitute less than 20 per cent of the curriculum. The median figure for optional work is less than 15 per cent.

A general summary, therefore, indicates that the most common or typical practice is that in which slightly over one-half of the curriculum consists of required technical or vocational courses, almost one-third consists of required general or cultural courses, and the remaining one-sixth is optional.

The proportions summarized in Table X are for all types of terminal curricula. It will be more instructive to present similar tabulations for the eight major terminal curricular fields already used so frequently. This is done in Table XI.

Table XI. Composition of Curricula in Eight Major Terminal Educational Fields

Per Cent	Agriculture (11)			Business (143)			Engineering and Technology (52)			Fine Arts (46)		
	Vocational	General	Optional	Vocational	General	Optional	Vocational	General	Optional	Vocational	General	Optional
Median	44.5%	43.3%	13.3%	54.3%	27.4%	14.9%	60.4%	22.5%	12.0%	47.5%	26.8%	19.5%
100	–	–	–	3	–	–	2	–	–	–	–	–
90–99	–	–	–	2	–	–	–	–	–	–	–	–
80–89	–	–	–	9	1	–	8	–	–	2	–	–
70–79	1	1	–	15	3	–	6	1	–	3	–	1
60–69	–	–	–	26	7	–	11	1	–	6	–	1
50–59	2	2	1	32	7	7	7	7	3	10	2	5
40–49	5	4	1	17	18	10	6	4	2	10	11	4
30–39	2	1	–	26	27	11	7	6	7	9	6	6
20–29	–	1	1	7	41	29	4	10	5	4	15	6
10–19	1	1	4	5	30	32	1	16	12	1	8	11
0–9	–	1	4	1	9	54	–	7	23	1	4	12

Per cent	Health Services (22)			Home Economics (21)			Journalism (7)			Public Service (34)		
	Vocational	General	Optional	Vocational	General	Optional	Vocational	General	Optional	Vocational	General	Optional
Median	62.8%	32.8%	6.0%	48.3%	32.5%	20.7%	24.5%	44.5%	24.5%	38.1%	42.8%	16.5%
100	1	–	–	–	–	–	–	–	–	–	–	–
90–99	1	–	–	–	1	–	–	–	–	–	–	–
80–89	4	–	–	–	–	–	–	–	1	–	1	–
70–79	3	–	–	1	–	1	–	–	1	2	1	–
60–69	3	1	–	3	1	–	–	1	1	1	4	2
50–59	4	3	–	6	2	–	1	2	–	7	7	1
40–49	3	5	–	4	3	1	1	1	–	6	6	2
30–39	2	3	–	4	5	5	1	–	–	7	5	4
20–29	1	4	2	1	3	4	1	1	1	7	6	5
10–19	–	2	3	1	5	3	1	1	–	1	3	10
0–9	–	4	17	1	1	7	2	1	3	3	1	10

Again wide diversity is shown in the proportions of required vocational and general curricula in each of the major groups.

Three curricula of the general business field, two in engineering and technology, and one in health services, are composed entirely of required vocational courses. On the other hand, eight curricula are reported as being composed of less than 10 per cent required vocational courses. These low percentages of required vocational courses may be explained in part by the degree of rigidity of the requirements of the institutions concerned. Some institutions depend in part on counselling procedures rather than strict requirements to govern the number of vocational courses taken.

A few sample distributions may be mentioned. The music curriculum of Citrus Junior College, California, is composed of 40 per cent required vocational courses, 25 per cent required general courses, and 35 per cent optional courses. The business curriculum of McCook Junior College, Nebraska, is composed of 50 per cent vocational courses, 25 per cent general, and 25 per cent optional courses. The medical-secretarial curriculum of Scranton-Keystone Junior College, Pennsylvania, is composed of 75 per cent required vocational and 25 per cent required general courses. The petroleum technology curriculum of Coalinga Extension Center, California, is composed of two-thirds technical work, one-sixth academic work, and one-sixth related technical work.

Even more significant variations are found when median figures for the different types of curricula are compared. This figure, as given in Table XI, is more than 60 per cent for required vocational courses in the curricula in the fields of health services and engineering and technology; less than half this amount of required vocational work in the curricula in journalism.

Special Methods of Instruction

Item VIII of Part C of the *Information Blank* read: "If the methods of instruction used in this curriculum differ from those conventionally used in preparatory and preprofessional curricula, state what different methods are used." In answer to this item, the following different methods were listed among others:

Numerous field trips
Extensive use of visual education
Diagnostic and remedial instruction
Community leaders used as special lecturers
Direct supervision in medical technique courses
Less requiring each student to do what other students are doing
Use of home unit and living room as practice ground for meal planning and service
Emphasis on individual instruction and consultation, especially with less capable students
Applied work in laboratory—especially in business, engineering, fine arts, and home economics
Students are required to have their own projects, especially in agriculture and engineering, and much of the course work is related to these projects. If projects are carried on away from the college, instructors visit projects and help students with individual problems.

Los Angeles City College characterized the method of instruction and content of all its semiprofessional courses as follows:

> Courses are one semester in length, usually without prerequisites. They are less theoretical than conventional courses and more pointed toward actual practical work procedures. Both content and method are determined so far as possible by the conditions to be met in employment. They are not sequence courses in the sense common to academic courses, nor are they intensely specific as are trade school courses. The courses as well as curricula are organized in conjunction with workers in the field, and top professional people are frequently brought into the courses as lec-

turers, or used in connection with field or exploratory trips. Field and survey trips are at times used as definite class work, not merely as sightseeing tours.

Cooperative method. A very important method, reported with numerous variations from a considerable group of institutions, is that of cooperation with business and industry in giving the student actual experience while he is still in college. The so-called "cooperative plan" in education was developed in the engineering field at the University of Cincinnati in the early years of the present century. For further discussion of the cooperative plan and a list of junior colleges reporting this type of work, the reader is referred to Chapter XI, pp. 141-43, and to all of Chapter XIII.

Special Features and Unusual Offerings

Question VIII of Part A of the *Information Blank*[17] was general in character: "Please describe as fully as feasible any special features, unusual offerings, or unique methods involved in your terminal programs which are not adequately reported above or in parts B or C of the *Information Blank.*"

One institution replied with significant and eloquent brevity, "We are not allowed to be unusual!" but fortunately this restriction is not characteristic of the junior college movement as a whole. The junior college is distinctly an experimental institution and many unusual plans are being tried under diverse conditions in various parts of the country.

Following are some of the more interesting reports that were made, usually in the words of the respondent, although in a few cases slight editorial changes have been made.

> We have a special "T-Course" for our lowest ability group. "T" means *Trial* for the first year, and *Training* for the second year. For both years the credit received is not transferable. About 15 per cent of each entering freshman class are required to take the T-Course because they have (a) less than 4½ recommended high school units, and (b) their score on the American Council on Education Psychological test is below the 35th percentile. A general statement of the objectives of this course, which was organized in 1938, is given in the *California Journal of Secondary Education* (November 1939), 14:400-3. About 20 per cent of these T-Course students are selected for transfer to one of the 27 semiprofessional or technical courses. About 20 per cent remain for at least part of the second year's work. About 10 per cent are disqualified. The rest drop

---

[17] See the appendix, p. 257.

out during the first year. We feel that this plan is some improvement over no segregation of these students, but the curriculum needs further development.—SAN JOSE JUNIOR COLLEGE, California.

In our distinctive mechanical science program the judicious reduction of specialized subject matter, the careful balancing of classroom instruction, visual demonstration, and individual experimentation are intended to make possible a maximum amount of training during the two-year period. The fundamentals thus learned are presented in such a manner that the student can continue his professional development by his independent effort after graduation. This program has been formulated and its development is being supervised by the Norwich Section of the American Society of Mechanical Engineers.—NEW LONDON JUNIOR COLLEGE, Connecticut.

We have a faculty committee studying the need of adapting course techniques to the type of mind represented in terminal programs. It is our opinion that terminal curricula may be defeated in their objectives by attempting to offer the courses included in each curriculum by the same methods used in teaching transfer students, and by grading achievement in the light of transfer standards. We do not think of the terminal and transfer students as being bright and dull respectively, but rather conceive of each group as having its own type of intellectual understanding.—MORRIS JUNIOR COLLEGE, New Jersey.

Our department of Indian arts and crafts is not intended primarily as a vocational course, but doubtless has certain terminal implications, in that a few students may be enabled to earn a part of their living through beadwork, silverwork, weaving, and painting. We do not know of any other college teaching these items for the particular benefit of Indians. We also have an optional vocations course as part of Sunday religious group organizations.—BACONE COLLEGE, Oklahoma (a junior college for members of the Indian race).

Our terminal program has tried to stress the cultural rather than the vocational courses although we have a terminal business course. We have, e.g., courses in the history and appreciation of music and a survey of world culture, which, we believe, will help the student in his later adjustments by giving him a good cultural background.—BETHANY LUTHERAN COLLEGE, Minnesota.

Survey courses are given or required in mathematics, biology, social science, humanities, and physical science. We, therefore, regard our whole program as terminal.—ARMSTRONG JUNIOR COLLEGE, Georgia.

Beginning in fall of 1940 all secretarial students take a course in ethics. Though entitled business ethics, it is fundamentally a course in wisdom in general conduct, and study of the principles and philosophies of life.—COLORADO WOMAN'S COLLEGE.

A farm short course of 8 to 12 weeks has been offered to young men of sufficient maturity who live on farms in the surrounding locality and cannot attend the regular nine-months course. These young men need not be high school graduates.—WORTHINGTON JUNIOR COLLEGE, Minnesota.

We have a well-developed secretarial and commercial set of courses. All of our students are treated on an individual basis. The result is that no two students are enrolled for the same pattern of courses. This makes it very difficult to state how many are enrolled in any one so-called course, but we believe that the individual needs of the students are better served this way.—SAN MATEO JUNIOR COLLEGE, California.

Our semiprofessional engineering program is based upon the following: (1) Two years of technical training must be general to train for a "family of occupations"; (2) designed to train for general factory and employment, not machinists, molders, etc.; (3) work is all dovetailed on project method basis. All semiprofessional and terminal work is definitely terminal. We do not encourage any bridging between professional, preparatory, and terminal work on the grounds that to do so the terminal objective would be defeated.—VIRGINIA JUNIOR COLLEGE, Minnesota.

No pseudo or hobbies in this automotive trades curriculum. Manipulation and shop instruction are performed on a privately owned automobile and charged for based on national factories flat rate prices.—MODESTO JUNIOR COLLEGE, California.

The students have painted special murals for both art studios. The students plan and carry out furnishings and decorations in rooms being refitted by the college. One of the studios has as part of its equipment a complete model room. The students plan the papering, draperies, carpet, furniture, lamps, and all accessories. The appointments of the room are completely changed from time to time. One of the large Washington department stores cooperates in these projects.—NATIONAL PARK COLLEGE, Maryland.

The United States Reclamation Service is in the process of establishing offices to begin the construction of a dam to irrigate this corner of the Dust Bowl. In cooperation with Altus College and the National Youth Administration a project for 40 boys has been worked out. The program will be terminal with the college. The following is a summary of the anticipated training: (1) Laboratory—gravel and sand analysis and testing, concrete formulae and testing, soil analysis, water analysis for crops; (2) Field work—practical surveying, mapping and charting of topography of country; (3) Drawing—drafting and tracing maps, calculations; (4) Shop—construction of equipment, repair of equipment, operation of engines; (5) Clerical—warehouse invoicing, checking in and out of equipment, general office work; and (6) Weather study.—ALTUS JUNIOR COLLEGE, Oklahoma.

Our vocational trade and industrial program consists of the operation of a hosiery mill whereby at present 270 students are employed in learning the operation of hosiery machinery. In turn these students manufacture full-fashioned silk hose. They are paid at a certain stated sum while learning. They are paid on the basis of production after they become efficient in this work. The purpose of this type of work is to provide assistance whereby a student can pay the expenses of his college work, and at the same time learn a trade. We have six instructors in this field who are skilled workers in the manufacture of silk hosiery. Practically every student who has completed this course has immediately found employment in the hosiery manufacturing business. Possibly our greatest problem, in connection with this curriculum is to be certain that the work is primarily educational and not too much industrial.—JONES COUNTY JUNIOR COLLEGE, Mississippi.

Chapter VII

INSTRUCTIONAL STAFF FOR TERMINAL CURRICULA

THE KEY TO THE ULTIMATE SUCCESS of terminal education, of course, is not in the organization and plan of the curricular offerings, but in the effectiveness with which terminal courses are taught. Here, as in every phase of education, the teacher is the factor of supreme importance. It is desirable, therefore, to make some inquiries into the preparation and qualifications of faculty members who are giving instruction in the different terminal curricula.

The last question in Form C (see appendix, p. 261) asked for information on highest degree held, percentage of total time devoted to occupational subject, teaching and nonteaching experience, and methods of keeping up with new developments in the instructor's special field. Usable replies were received concerning almost 1,100 instructors in all types of institutions in different parts of the country.

Highest Degrees Held

Information concerning the highest academic degrees held by instructors in terminal courses is presented in Table XII and summarized graphically in Figure 24. Figure 24 shows that over half of the instructors hold the master's degree, and that almost two-fifths of them hold either the master's or doctor's degree. Only one-eighth of them have no college degree.

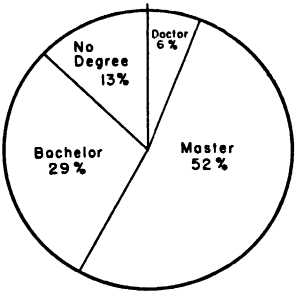


Figure 24. HIGHEST DEGREES HELD BY 1,076 INSTRUCTORS IN TERMINAL CURRICULA

The smallest proportion of academic degrees is found among instructors in fine arts and in engineering. In these fields from a third to a quarter of the instructors are not college graduates. It is probable that they have been chosen in many cases primarily on the basis of their experience and competence in technical or artistic fields as judged by other evidence than college graduation. Over half of the instructors in all fields except fine arts have a degree in advance of the bachelor's.

In order to give these data more meaning, it ought to be possible to compare them with similar data for instructors in the academic fields in the same group of institutions, or, if such data are not available, then with similar data for a large and representative group of instructors. So far as known, no such data have ever been collected for the academic fields exclusively. Nor are data concerning the academic preparation of a large group of junior college instructors at hand for a year close enough to 1940 to make comparisons entirely valid.

Table XII. HIGHEST DEGREES HELD BY INSTRUCTORS IN TERMINAL CURRICULA

Field	Number	Per cent of instructors holding			
		Doctor's	Master's	Bachelor's	None
All fields	**1,076**	**6**	**52**	**29**	**13**
Agriculture	24	4	54	42	0
Business	445	3	55*	35	7
Engineering	166	10	44†	19	27
Fine arts	134	3	36	28	33
Health services	77	25	48	22	5
Home economics	68	4	49	34	13
Journalism	8	13	75	12	0
Public service	154	6	69	23	2

* Includes 2 C.P.A.
† Includes 2 C.E.

The most extensive study was made by Wahlquist a decade ago.[1] He secured information from 1,236 instructors in both public and private junior colleges in 32 states in 1930. A comparison of the highest degrees held by this group with those summarized in Table XII, expressed on a percentage basis, is as follows:

Highest degree held	*Wahlquist*	*Present study*
Doctor's	5%	6%
Master's	59	52
Bachelor's	29	29
None	7	13

There is little doubt that the proportion of instructors holding the higher degrees has increased somewhat since Wahlquist made his study 10 years ago. If this probability is disregarded, however, the data would suggest that the instructors in terminal fields are not quite so well prepared, academically, as instructors in general. Probably most of those studied by Wahlquist a decade ago were in the academic fields. The same number have bachelor's degrees in both groups, but about twice as many of the instructors in terminal curricula have no degrees as in the earlier general group. In many cases, of course, particularly in such fields as art and music, this lack of an academic degree is more than compensated for by private training, travel, and professional experience.[2]

---

[1] J. T. Wahlquist, "The Status of the Junior College Instructor," *Junior College Journal* (December 1930), 1:125-34. Material is available for a much more comprehensive and up-to-date study for 1940 of almost 500 junior colleges in *American Junior Colleges* (W. C. Eells, editor), but this has not been summarized.

The question may be raised, but cannot be answered here, whether many of the present instructors might not be prepared better for the courses they are giving if there were less emphasis upon academic degrees and more upon a variety of occupational experience. It is a question whether the standards of accreditation agencies should not be modified to permit such preparation to be accepted as equivalent in many cases to the master's degree for instructors in the academic fields. Some accrediting agencies already make such exceptions, either in the actual statements of standards, or in their administrative interpretation of these standards.

Teaching and Occupational Experience

Two-thirds of the instructors in occupational courses for whom data are available have had nonteaching experience in their own occupational field, varying from one to more than 30 years each, and averaging almost five years each. In the fields of agriculture, engineering, and journalism, four-fifths of the instructors have had such experience. Wahlquist found that only two-fifths of the group of instructors which he studied had had previous occupational experience in any field except teaching, and that the median amount of such experience was only 2.5 years.[3] The occupational group included in the present study thus have a much better record in this respect, a very much larger proportion having had on the average twice as much occupational experience.

This group of instructors have had teaching experience varying from one to more than 50 years and averaging more than nine years each.

---

[2] In California, where standards of preparation of junior college instructors are considerably higher than in most parts of the country, and also where there has been the most significant development of junior college terminal education, the distribution of highest degrees held for 1,106 instructors in public junior colleges was, in 1938: doctor's, 12%; masters', 59%; bachelors', 25%; none, 4%. Garrison in a doctoral dissertation at Yale University in 1940 collected information on highest degrees held by 716 instructors in 51 public junior colleges in 19 states. He found the following distribution: doctors', 7%; masters', 74%; bachelors', 18%; none, 1%. (Lloyd A. Garrison, *Junior College Teachers: Their Academic and Professional Preparation,* Yale University, New Haven, Conn., 1940, p. 38.)

[3] Wahlquist, *op. cit.,* p. 129.

These two groups of facts indicate a thoroughly experienced group, both from the standpoint of teaching and nonteaching experience. They certainly are not novices.

Further information on teaching and nonteaching experience of instructors in terminal curricula will be found in summary form on a percentage basis in Table XIII, and in greater detail in actual numbers of individuals in Table XXXV in the appendix, p. 242.

Table XIII. Occupational Experience of Instructors in Terminal Curricula

Field	Number	Teaching experience in years‡ (Median)	Per cent with non-teaching experience in occupation	Nonteaching experience in years* (Median)
All fields...	**1,076**	**9.2**	**66**	**4.9**
Agriculture. .	24	10.8	79	9.5
Business.....	445	8.7	69	3.7
Engineering..... .	166	8.3	81	7.2
Fine arts......	134	9.3	57	5.2
Health services.. .	77	8.5	49	4.5
Home economics....	68	9.5	47	4.0
Journalism.....	8	10.3	87	4.5
Public service..	154	12.3	25†	3.0†

* Does not include 17 per cent who reported nonteaching experience in their occupation but did not report number of years.

† Based on only 24 instructors in curricula other than the teaching field.

‡ Does not include 68 instructors for whom information was not given.

Full-time vs. Part-time Instructors

More than half of the instructors for whom data are available teach full-time in the occupational field to which they are credited—a thoroughly healthy and desirable situation. Almost half of the remainder devote at least half of their time to the vocational field. The ideal situation, presumably, in most institutions would be for all instructors in terminal curricula to devote all of their time to instruction in their own fields.

The largest proportion of full-time instructors is found in the engineering field with almost three-quarters of the staff members thus classified. More than three-fifths of the instructors in agriculture and the fine arts are giving full time to their respective fields.

Further information on full-time and part-time instructors in terminal curricula will be found in summary form on a percentage basis in Table XIV, and in greater detail for actual numbers of individuals in the third section of Table XXXV in the appendix.

Table XIV. PROPORTION OF TIME OF INSTRUCTORS IN TERMINAL CURRICULA DEVOTED TO THEIR OCCUPATIONAL SUBJECT

Field	Number	Per cent of instructors devoting		
		Full time	Part time	No report
All fields	**1,076**	**55**	**40**	**5**
Agriculture	24	63	29	8
Business	445	58	40	2
Engineering	166	73	21	6
Fine arts	134	62	30	8
Health services	77	47	43	10
Home economics	68	56	34	10
Journalism	8	38	62	0
Public service	154	27	66	7

Keeping Up with New Developments

The last question on Part C of the *Information Blank* asked how the instructor in each of the terminal curricula was keeping up with new developments in his special field. Answers were too varied and incomplete to warrant significant summarization in tabular form, but the data submitted may be grouped approximately as follows:

1. Reading professional and trade journals and books. Reported very frequently. One instructor in auto mechanics reported subscribing personally for $35 worth of trade magazines and buying $100 worth of trade books annually.
2. Advanced study in the special field or related fields. Sometimes this was part-time or extension work during the college year, but most frequently and quite commonly summer study was specified. A considerable number of instructors are working definitely toward the master's or other advanced degrees.
3. Attendance at meetings of professional and trade associations and organizations—local, state, regional, and national. Less frequently was reported active participation in such organizations as officers, committee members, appearances on programs, etc.
4. Visits and inspection trips to manufacturing plants, business organizations, retail stores, airplane factories, machine shops, engineering works, museums, galleries, newspapers, fashion shows, etc. Visits to other junior colleges were mentioned only occasionally.
5. Travel, both foreign and in the United States, with related study, sketching, observing, and similar activities in areas of special interest related to the teaching field.
6. Part-time employment during the college year or summer employment. This type of employment was reported in such diverse fields as making chemical analyses; working in airplane factories; working at such trades as carpentry, mechanics, auto repair, printing, dressmaking,

cosmetology, construction, etc.; assistant city engineer, United States Coast and Geodetic Survey, consultant engineer, draftsman, aviation consultant, radio service, certified public accountant, private auditing work, advertising, insurance, supervision of sales force, investment companies, practicing law, store personnel work, newspaper work, working at Mayo clinic and other hospitals and laboratories, participation in Chautauqua programs, preparation of exhibits, concert work, direction of orchestras and choruses, production of ceramics, little-theatre direction, costume design, art work for city stores, small homes adviser for furniture company, direction of Federal theatre projects, musical broadcasting, and dietitian.

7. Research, experimentation, and authorship. Less frequently than desirable was authorship reported, either of books or magazine articles. Research is implied, of course, in some of the summer study, especially that looking toward an advanced degree. One instructor reported a definite allotment of two days a month for research, but such a plan is the exception. Here may be classified, too, several reports of direction of business surveys.

8. Interviews with business and professional men, business and professional contacts, membership in community organizations, placing students in part-time jobs in the community, and a variety of other community contacts were frequently indicated.

On the whole one gains the feeling from studying the replies that the instructors in these different terminal fields are doing a great deal to keep up to date in their respective fields and to keep in touch with the present needs and demands of business and industry and of other semiprofessional fields.

Chapter VIII

EQUIPMENT FOR TERMINAL CURRICULA

ONE INQUIRY in Part C of the *Information Blank* asked what special equipment was available for the use of students enrolled in the particular curriculum upon which the report was based. Number of each kind of equipment and approximate cost were requested, when possible to give it.

It is difficult to summarize the varied array of lists, values, and other information which was furnished in response to this question. In many cases it is impossible to do so on any comparable basis. In such cases only selected samples can be given with no attempt at covering completely all reporting institutions. The arrangement of the material in this chapter is in terms of the eight general terminal areas already used so frequently.

Agriculture

Fifty-two junior colleges reported demonstration farms varying in size from seven to 1,800 acres, distributed as follows:

Acres	*Junior colleges*
0- 99	12
100- 199	12
200- 299	11
300- 399	7
400- 499	2
500- 999	6
1,000-1,999	2
	52

The average size of these 52 farms was 294 acres. Several institutions stated that the dairy, poultry, and general farming carried on largely by students, not only supply practical experience to the students, but also make the boarding department to a considerable extent self-sustaining.

John Tarleton Agricultural College, Texas, reported equipment valued at $35,000 in the fields of dairying, horticulture, agronomy, veterinary medicine, poultry, woodworking, and general agriculture.

Potomac State School, West Virginia, reported for its 129-acre farm 35 registered Ayrshire cattle, 650 White Leghorn chickens, 25 hogs, 2 horses, 2 trucks, a tractor, a chopper and ensilage cutter, a hammermill, and a variety of smaller equipment and tools.

Business

Sixty-four junior colleges gave specific information on number and type of business machines, which may be summarized briefly as follows:

TYPEWRITERS

Number	*Junior colleges*
1- 9	3
10-19	18
20-29	20
30-39	10
40-49	3
50-59	4
60-69	4
70-79	1
90-99	1

Median—26

ADDING AND COMPUTING MACHINES

Number	*Junior colleges*
1	24
2	12
3	6
4	3
5- 9	6
10-19	7
20-29	4
30-39	1
40-49	1

Median—2

MISCELLANEOUS EQUIPMENT

Type	*Junior colleges*
Mimeograph	51
Ditto machine	20
Dictaphone (1 only)	13
Dictaphone (more than 1)	7
Mimeoscope	19
Ediphone	12
Posting machine	11
Bookkeeping machine	5
Addressograph	4
Phonograph	4
Checkwriter	5
Hectograph	3
Switchboard	3
Graphotype	2
Stenotype	2

Seventy-seven institutions gave data on total cost of their equipment in business education. These data are summarized as follows:

Total cost	*Junior colleges*
$ 0- 999	7
1,000- 1,999	21
2,000- 2,999	18
3,000- 3,999	4
4,000- 4,999	9
5,000- 9,999	14
10,000-11,999	4

Median—$2,600

Engineering and Technology

Many institutions reported that they are "well equipped," "adequate," or have "excellent shops," but gave no further details. Others reported long lists of equipment with value of each. In aviation, and to a certain extent in other fields, several institutions reported extensive equipment and parts loaned or donated by the government or by private industries.

Sixteen junior colleges gave estimates of the approximate cost of their equipment in various engineering and technological fields, which may be summarized as follows:

Cost	*Junior colleges*
$ 0- 5,000	3
5,000-10,000	3
10,000-20,000	1
20,000-30,000	4
30,000-40,000	2
50,000	2
75,000	1

It will be more informing, however, to report costs given for equipment in specific courses for a few institutions. This is done below, with indication in some cases of nature of the equipment.

Aviation

Pomona Junior College	$50,000
Pasadena Junior College	20,000
Idaho, Southern Branch (See list below)	16,220
North Texas Agricultural College	10,110
Modesto Junior College	5,565
Sacramento Junior College (Aircraft sheet metal shop)	2,700

Auto mechanics

Pasadena Junior College	$ 6,000
Carbon College	5,000
(Complete equipment for engine repair, tune-up, ignition, front end and chassis, metal and paint work)	
Modesto Junior College	4,355
Idaho, Southern Branch (See list below)	2,735
(Auto mechanics, body and fender repairs)	

Engineering, agricultural

Modesto Junior College	$ 1,165
(Farm building equipment, farm mechanics, farm machinery, farm power, farm surveying and leveling)	

Engineering, electrical

North Texas Agricultural College	$ 9,885
San Bernardino Valley Junior College	6,000
(5 motor-generator sets, switch boards, test table, meters, lathe, grinder, wiring boards, etc.)	

Engineering, general

Glendale Junior College (Surveying and drafting instruments and drafting machines)	$ 5,000
Modesto Junior College (Surveying instruments, including 6 transits, 3 levels, 2 plane tables, 3 sextants, etc.)	4,000

Machine shop

North Texas Agricultural College	$18,625
Chanute Junior College (9 lathes, shaper, mill machine, drill press, arc welder, gas welding outfit, grinder, saws, forges, furnaces, etc.)	18,000
Carbon College (Welding machines, machine shop, bench equipment)	12,000
Los Angeles City College (Steam engines, gas engines, diesel engine, pumps, refrigerating equipment, welding equipment, etc.)	10,000
John Tarleton Agricultural College	5,800
Northeastern Oklahoma Junior College (Machine lathe, welding outfit, drawing equipment)	2,100

Printing

Idaho, Southern Branch (See list below)	$12,425

Radio

Glendale Junior College (Recording equipment, $1,000; laboratory equipment, $2,000; transmitter, $300)	$ 3,300
San Mateo Junior College (1,000-watt transmitter, receiving set, code tables, radio parts)	1,000

Woodworking and carpentry

Chanute Junior College (Complete set full-size Yates-American machines)	$10,000
Carbon College (Power machinery and hand tools)	4,000
Modesto Junior College	4,350
Idaho, Southern Branch	690

Cost of this equipment per student enrolled can be estimated, if desired, from the data on enrollment in the different courses reported in the appendix, pp. 212-29.

Several carefully compiled lists of equipment were submitted by the University of Idaho, Southern Branch. Four of these are given below.

Aviation Mechanics

1	Hangar building, 10 plane capacity—65′ x 140′	$40,000
1	Fairchild observation plane	7,000
4	Pratt-Whitney whirlwind engines	2,800
1	Challenger engine	1,200
1	Liberty motor	500
	Unassembled motor parts	2,000
	Unassembled plane parts	1,500
	Paint shop equipment; compressors, spray guns, etc.	400
1	12″ bandsaw	40
1	Sanding machine	20
1	Circular saw	30

1	Jointer	30
2	Electric drills portable	100
2	Stand drills	150
3	Bench machine vises	50
	Miscellaneous hand tools, clamps, hammers, etc.	400

Auto Mechanics

General

1	South Bend 7′ lathe	$ 400
1	Stand grinder	50
1	Stand test set	150
2	Acetylene welding sets	120
1	Boring machine	150
1	Hydraulic press	150
1	Spark plug tester	40
1	Spark plug cleaner	7
1	Rod aligner	50
2	Portable compressors	100
2	Hydraulic jacks	120
	Miscellaneous small tools, wheel pullers, special wrenches, etc.	300

Body and Fender Work

1	Air hammer set	$ 150
1	Porto-power set	210
1	Compressor	200
3	Spray outfits	180
1	Hydraulic jack	60
	Special hammers and hand tools, files, etc.	300

Carpentry

1	10″ circular saw	$ 150
1	14″ bandsaw	50
1	Stand drill press-mortiser combination	80
1	Take-about sander	90
1	Lathe	40
1	6″ jointer	80
	Miscellaneous small tools	200

Printing

1	Linotype machine	$ 4,500
1	Cylinder press	3,000
1	Vertical press	2,500
1	Platen press	200
1	Circular saw (metal)	250
1	Paper cutter	200
1	Stapler and stitcher	100
1	Perforator	75
2	Type cabinets	400
1	Stone	100
	Type	1,000
1	Melting furnace	50
	Miscellaneous tools	50

That the equipment is considered far from adequate, however, is shown by the fact that the following additional expenditures are being requested for next year in order to make each course complete in its equipment and to provide for an average increase of four students per class:

Aviation mechanics	$3,000
Auto mechanics	4,060
Body and fender work	2,750
Carpentry	1,860
Printing	7,485

In addition, each student is required to purchase his own set of hand tools. These cost approximately $20 each for aviation mechanics, $15 for auto mechanics, $50 for carpentry with $7 additional for drafting tools.

The most unusual equipment reported was a complete hosiery mill with full-fashioned equipment, leggers, footers, seamers, loopers, examiners, etc., at Jones County Junior College, Mississippi. The work is done by the students under the direction of six instructors who are skilled workers in the manufacture of silk hosiery.[1]

Fine Arts

Following are brief summaries of reports submitted by various junior colleges showing valuations and in some cases nature and amount of equipment in the various curricula included under the designation "fine arts."

Art

North Texas Agricultural College (Carnegie art set, 2,000 slides, drawing tables, air brush and compressor, illustrative materials)	$ 2,850
National Park College (107 casts, statues, etc.; easels, drawing boards, etc)	2,560
Gulf Park College (Casts, backgrounds, easels, etc.)	1,110
Finch Junior College (Equipment for painting and sculpture)	1,000
Williamsport Dickinson Seminary	1,000
Southern Seminary and Junior College	600
Lasell Junior College (Etching press, electric drill, kiln and parts, potters' wheels, stone setter, etc.)	550
Colorado Woman's College	375
Glendale Junior College	160

Costume Design

Finch Junior College (Mirrors, tables, sewing machines, dressforms)	$ 250

Dramatics

Los Angeles City College (116 stage furniture, $930; 179 scenery, $580; 103 stage lighting, $1,575; 1,032 stage properties, $240; 986 costumes, $2,550; 1,300 drama library, $3,250; 172 tools, $611, etc.)	$10,300
Finch Junior College	9,000

---

[1] For further details about this project, see Chapter VI, p. 101.

National Park College	3,250
Gulf Park College	1,110

Music

Gulf Park College (3 grand pianos, 16 uprights, electric recording machine)	$16,500
National Park College (two-manual pipe organs, 5 grand pianos, 18 uprights, etc.)	15,030
Modesto Junior College (23 orchestra instruments, 5 grand pianos, 2 victrolas and 1,000 records	8,900
Finch Junior College (3 grand pianos, 7 uprights, Carnegie music set)	8,000
Anderson College (2 grand pianos, 16 uprights, victrolas, etc.)	6,000
San Bernardino Valley Junior College (5 pianos, radio-phonograph, recording equipment)	2,900
Little Rock Junior College (2 pianos, victrola, Carnegie music set)	2,000
Oceanside-Carlsbad Junior College (6 pianos, victrolas, etc.)	750

Photography

Los Angeles City College (Cameras, flood lights, accessories, finishing equipment, etc.)	$ 2,350
Glendale Junior College	810

Health Services

Much of the equipment necessary for students in courses for dental assistants, medical secretaries, and nurses is the same as found in the physics, chemistry, and biological laboratories and in the business education department. A few reports were received, however, of special equipment for these fields and value of it.

Dental assistants. Los Angeles City College, which has offered a particularly successful course for dental assistants for several years, reported the following equipment for a group of 50 students, with the estimate that it can be secured for $5,000.

1. Dental office exactly as found in actual practice, complete with Ritter dental chair, American dental cabinet complete with all instruments, steam pressure sterilizer, boiling sterilizing unit, Ritter senior dental unit, drinking glass cabinet.
2. Dental business administrative office, complete with four-drawer legal-size letter file, desk, telephone (interoffice to test voices), typewriter.
3. Dental reception room.
4. Dental laboratory, large enough to take care of 50 students, complete with air compressor and individual outlets of air and gas, Ritter lathe, porcelain furnace, inlay electrical oven, pressure casting machine, centrifugal force casting machine with torch, operating light, inlay scale, and all supplies and equipment necessary to teach mixing of plastic materials, laboratory work, etc., to 50 students.

5. Dental anatomy laboratory with standard equipment and supplies necessary to teach 50 students, including X-ray laboratory, X-ray machine, X-ray chair, darkroom with complete equipment; planned for eight students to each X-ray laboratory section.

Medical-secretarial. William Woods College, Missouri, reported the use of laboratory equipment in the Missouri State Hospital of a value of $50,000. Other reports regarding equipment owned by junior colleges follow:

Scranton-Keystone Junior College (Medical microscopes, bacteriology, clinical laboratory materials, biology, typing, stenography, medical office equipment)	$9,295
Lasell Junior College (Typewriters, ediphones, chemistry equipment, microscopes, dissecting apparatus, skeletons and models)	7,200
Georgetown Visitation Junior College (Well-equipped laboratory for medical secretaries)	5,000
Herzl Junior College (100 scientific items to equip laboratory for 20 students)	2,000
Highland Junior College (Bacteriological and clinical diagnosis laboratory equipment)	400

Nursing. Training for nurses makes use in many cases of the college chemistry and biology laboratories and of local hospital facilities. Two special reports are as follows:

Yuba County Junior College (Articulated skeletons, models, microscopes, dissecting sets, etc.)	$3,000
Ottumwa Heights College Microscopes, skeletons and parts, slides, etc.)	1,595

Home Economics

Reports from a few junior colleges on equipment in home economics are summarized below:

Finch Junior College (Cooking and nutrition laboratory with six double units; clothing and textile room equipped with sewing machines, etc.; four-room practice apartment equipped for serving meals and for weekly residence)	$4,750
National Park College (Foods department: silver, china, kitchen equipment, dining-room equipment; clothing department: sewing machines, ironers, tables, cabinets, etc.)	3,800
Garland School (Five electric stoves, three gas stoves, oven, electric garbage disposal, refrigerator, 10 sewing machines, washing machine, etc.)	3,350
Gulf Park College (Cooking laboratory and clothing laboratory, each fully equipped for 16 students)	3,055
William Woods College (Home economics laboratory, and apartment)	3,000

Bethel Woman's College (Electric refrigerator, gas plates, utensils)	1,680
Southern Seminary and Junior College (4 sewing machines, refrigerator, furniture and equipment for 12 students)	1,500
Lasell Junior College (Ice chest, 11 stoves, gas oven, silver, dishes, furniture, etc., for practice house)	1,195
Ottumwa Heights College (16 gas stoves, 5 sewing machines, electric irons)	1,000
Idaho, Southern Branch (Machines, models, and equipment for trade dressmaking)	600

Journalism

A few institutions listed typewriters (from two to seven), filing equipment, and in one case a darkroom. Sacramento Junior College, California, reported: "Four typewriters, copydesk and six chairs, telephone extension—oh, yes, two waste baskets. That's all. Investment—approximately $400."

Public Service

The great majority of the curricula listed under this heading involve preparation of elementary school teachers. The customary equipment in the way of maps, globes, charts, flash cards, and material for public school music and art was reported. Several institutions have fully organized training or laboratory schools or have arrangements for their use. These include Arkansas State Agricultural and Mechanical College; Bay City Junior College, Michigan; Bethune-Cookman College, Florida; College of Paola, Kansas; Georgia Southwestern College; La Sierra College, California; and Pikeville College, Kentucky.

For the work in preparation for recreational leadership, Los Angeles City College reported more than $3,000 worth of equipment including materials and equipment for archery, fencing, gymnastic work, games of low organization, and 300 museum specimens (bird study skins, mammal study skins, preserved fishes and reptiles, insect mounts, and plant mounts) prepared by the instructor and the students.

For the work in police training the same institution reported revolvers, police camera and related apparatus valued at $1,420; also fingerprint equipment, moulage equipment, chemical apparatus, police reports, and a $500 library.

Miscellaneous

For the work in cosmetology, Idaho Southern Branch reported equipment valued at $1,365 including 4 electric dryers, 2 permanent wave machines, 1 violet ray machine, and a varied equipment of sterilizers, mirrors, tables, chairs, etc. Sacramento Junior College gave a somewhat similar list costing about $1,000 and said that equipment valued at $3,000 to $4,000 should be provided.

Chapter IX

THE LIBRARY IN TERMINAL EDUCATION

WHILE MANY TERMINAL CURRICULA are distinctly practical in scope and while they stress laboratory and field work more than library work, there probably are none for which some supporting library material, both book and periodical, is not desirable and necessary. In order to obtain some idea of the amount actually available, Part C of the *Information Blank* contained a request to state the estimated number of special books, of periodicals, and of other library material available for the use of students in the particular terminal curriculum on consideration in the blank. (See appendix, p. 261.)

Books and Periodicals. Table XV presents a summary showing maximum and median number of books and of periodicals reported

Table XV. Special Books and Periodicals Available for Students in Terminal Curricula
(Curricula reported by less than 3 institutions omitted)

Field	Number of junior colleges	Number of books		Number of periodicals	
		Maximum	Median	Maximum	Median
Agriculture	11	3,000	65	50	8
Business education, general	66	1,000	100	24	5
Accounting	4	200	140	10	5
Merchandising	4	456	155	15	7
Salesmanship	6	100	75	12	4
Secretarial	59	586	50	12	3
Engineering, general	15	2,000	50	20	5
Auto mechanics	4	75	23	4	3
Aviation	10	717	33	20	5
Chemical	4	940	220	6	6
Electrical	3	250	75	15	2
Mechanical	3	200	100	10	10
Radio	4	100	16	4	3
Speech and dramatics	7	480	200	5	1
Medical-secretarial	13	400	143	12	4
Nursing	7	900	100	8	4
Home economics	34	2,021	75	45	6
Journalism	9	200	50	5	3
Physical education	5	300	50	5	3

in 19 curricula for which reports from three or more institutions were received. The reports were usually prepared by the instructors in the particular curricula not by the librarians. In some cases evidently numbers are exact counts; in others, only estimates. Doubtless there is some overlapping, also, between related fields. The largest number of volumes are reported in agriculture, home economics, general engineering, and general business. Median numbers tend to be much lower than the maximum figures, probably too low for an efficient library in many cases. It must be remembered, however, that emphasis upon terminal education in most of these areas is relatively recent. Often junior colleges have not had the time nor the funds with which to build up adequate collections.

Median number of periodicals range from one to 10 in the different fields. In most fields probably three to five specialized periodicals are sufficient to meet the needs of students in terminal curricula in the average junior college. Perhaps a larger number is desirable, however, if adequate consideration is to be given also to the needs of the instructors.

New purchases. Some measure of the extent and variety of new purchases in different terminal fields may be gained by a consideration of data furnished by the cooperative junior college library purchasing service at the University of Michigan. The Michigan library has acted for several years as a central purchasing bureau for new books ordered by the 93 junior college libraries which received grants of $300,000 in 1937 from the Carnegie Corporation of New York.[1]

Number of different titles and total number of volumes in each of 20 vocational groups purchased in 1939 and 1940 are shown in Table XVI. It will be noted that the largest number of titles, as well as the largest number of copies, was in the field of business.

Other resources and materials. A considerable number of instructors called attention to extensive additional library materials available in state, public, and university libraries, as well as to their personal collections which they put at the disposal of the students.

Among "other library materials" most frequently mentioned were pamphlets, bulletins, clipping files, picture files, Carnegie music sets of records, and Carnegie art sets. Displays, courses of study, test materials, charts and globes, and films were also mentioned frequently. One institution mentioned a picture collection of 4,000 items; another, 60 orchestra scores and 1,000 records; another, costume plates, color charts, and special folios. Institutions offering curricula in engineering and technology mentioned manufacturers' catalogs and bulletins and trade manuals. Instructors in the business fields called attention to business surveys, loose-leaf accounting and taxation services, house organs, news letters and reports of private research and forecasting agencies, films, manuals, and workbooks. The specialized resources of available art galleries, industrial museums, and special exhibits were also mentioned.

---

[1] R. M. Lester, "The Development of Junior College Libraries," *Junior College Journal* (October 1937), 8:3-9.

Table XVI. Number of Vocational Titles Ordered by 93 Junior Colleges Through the University of Michigan Junior College Library Purchasing Service, 1939 and 1940

Field	Number of titles	Number of copies
Architecture and decoration	14	28
Aviation	34	46
Business	130	163
Carpentry	13	13
Chemistry	15	19
Commercial art	13	18
Electricity	9	13
Engineering	28	32
Foods	15	32
General art	9	16
Handicraft	60	79
Hobbies	9	16
Home economics	17	35
Mechanical drawing	11	11
Mechanics	21	26
Metals and metalworking	11	12
Photography	30	45
Radio	15	31
Vocational guidance	70	102
Miscellaneous	8	10
	532	747

General library resources. The books, periodicals, and other material reported above are all vocational in nature. The junior college library has a special opportunity and obligation for terminal students from the general or cultural viewpoint as well as from the technical one. Three-quarters of the students in the average junior college will never enter the university nor have the opportunity to use a university library. The junior college, therefore, is their last school opportunity to learn to use and love a library. It is their best chance to secure an adequate concept of library methods, a knowledge of library machinery, and, above all, a taste for the library as a matter of general culture and good citizenship. If students are well trained in the use of the library in the junior college, they are much more likely to turn easily and naturally to the resources of the public library for leisure reading or special study after they have graduated.

Most junior college libraries are relatively small, and the student, therefore, can become acquainted easily with their resources. The most recent comprehensive information on size of junior college libraries was collected by the Carnegie Advisory Group on Junior College Libraries in its preliminary studies in 1935. In an analysis of 288 libraries, it was found that the number of volumes reported varied from only a few to 25,000 with a median of only 3,250. Only 17 had book collections in excess of 10,000 volumes. Number of periodicals varied from two or three to 187 with a median of 39.[2]

---

[2] W. C. Eells, "Junior College Libraries," *Junior College Journal* (January 1936), 6·202-6.

Chapter X

PERSONNEL AND GUIDANCE ORGANIZATION

PROBABLY THE MOST IMPORTANT FACTOR in successful terminal education in the junior college is the effective functioning of guidance and personnel services. Information should be available regarding the general and specialized abilities of each student, also concerning the requirements and opportunities in each of the semiprofessional fields. Suitable methods should be available for getting this information to the student at the proper time. Definite organization should be provided for placement of students after they have completed a specific terminal curriculum. There are many other desirable features, also, in an effective system of guidance, but those just mentioned constitute the minimum essentials if terminal education in the junior college is to be really successful.

How satisfactory is the organization and material for adequate guidance in junior colleges? How effectively is the organization actually functioning? These questions are far too comprehensive and important to be answered in a single brief chapter on the basis of a few elementary queries on a short blank dealing also with many other aspects of terminal education. The Terminal Study from the beginning has contemplated a special monograph devoted exclusively to this subject, to be prepared by a recognized specialist in the field, and to be based upon much more extensive information collected, not only by inquiry blanks but also by personal visits, study, and evaluation. A necessary partial revision of this plan involves extensive experimentation on selected personnel factors in a small group of junior colleges. (See Chapter XV.)

Source of information. Part A of the *Information Blank* contained a single section devoted to *vocational* guidance with no effort to inquire into the other important aspects of the broader field of guidance. This section contained five subdivisions, designed to elicit some significant factual information regarding the organization of the staff for guidance, the number of staff members engaged in guidance work, the information about individual students available to counselors, the methods of aiding students to obtain information on occupations, the collection of information on job opportunities, and the number and type of follow-up studies that had been made.[1] Information secured on these topics is summarized in the remainder of this chapter. Usable replies were received from 271 institutions, of which 144 were publicly controlled, 127 privately controlled.

It is evident that the organization for guidance in the small junior college of less than a hundred students may and probably should be quite different from that in the very large one of several thousand students. It is also apparent that the guidance program in the privately controlled institution, especially of the residential type, would differ from that in the local public institution. Summaries have been made, therefore, for both public and private junior colleges classified in four size groups, according to regular enrollments reported. These more detailed summaries are given in the appendix, p. 243. The number of institutions in each of these groups and average enrollments in them are shown in Table XVII.

Table XVII. Number of Institutions Reporting Guidance Information and Average Enrollment in Each Group

Group	Number		Average enrollment	
	Public	Private	Public	Private
Total	**144**	**127**	**572**	**193**
Small (0–99)	21	42	65	62
Medium (100–499)	89	79	250	214
Large (500–999)	14	4	669	631
Very large (1,000 and over)	20	2	2,455	1,245

Organization of the staff for guidance. Five possible plans were indicated under this heading, with a request to check all that applied:

a. Full-time director of guidance activities

b. Instructors act as counselors to small numbers of students assigned alphabetically or on other arbitrary basis

c. Instructors act as counselors to those students interested in occupations within their general fields

d. Several instructors or administrative officers act as guidance committee

e. Other. Describe it

It was, of course, possible in a single institution to have several of these plans checked, and this was often the case. It was assumed, however, that plans (b) and (c) were alternative methods of assignment of students to counselors. In several cases, however, both of these were checked in the same institution. Replies are summarized in Table XVIII.

---

[1] For exact phrasing of the inquiries under these topics see the appendix (pp. 256-57).

Table XVIII. PLANS OF ORGANIZATION OF JUNIOR COLLEGE STAFFS FOR GUIDANCE IN 271 INSTITUTIONS

Plan	Total number	Percentage distribution		
		Total	Public	Private
Full-time director....	39	14%	12%	17%
Students assigned alphabetically......	93	34	35	34
Students assigned on basis of occupational interests......	165	61	62	60
Guidance committee.. ...	113	42	44	39
Other plans...............	68	25	21	30

Less than one-seventh of the junior colleges reported a full-time director of guidance activities, two-fifths have a guidance committee (sometimes in addition to a full-time director), one-fourth described various other plans, while another fourth reported no organization of any type. Even in the 18 large institutions of 500 to 1,000 students, only three full-time guidance directors were reported, while in the 22 very large institutions with over 1,000 students, only 10 full-time directors were reported. The proportion of full-time directors is much higher in the private institutions, even though they are, on the average, much smaller in size.

Lack of more full-time directors is due to financial reasons in many cases rather than to lack of realization of the importance of such an official. Thus one state junior college with more than 400 students wrote: "We have had a personnel and publicity director. Since he left us, because of financial stringency, guidance work has been incidental and unplanned." The number of institutions that reported the assignment of students to counselors on the basis of occupational interests is almost twice as great as the number which uses a simple mechanical basis of assignment. No significant difference appears between publicly and privately controlled institutions in this respect.

Number of staff members. The total number of staff members engaged in guidance work and their equivalent in terms of full-time service were asked. Total numbers engaged in such work varied from 0 to 89 in the publicly controlled institutions, from 0 to 37 in those privately controlled. Maximum figures, in both cases, represent total number of faculty in institutions where the decentralized plan of guidance is in operation. Equivalent full-time service varies from 0 to 10 in the publicly controlled institutions, from 0 to 6 in those privately controlled. Pasadena Junior College, California, with more than 4,000 "upper division" junior college students, in addition to more than 3,000 in the "lower division," has organized its guidance work on the centralized plan with a dean of guidance and nine full-time trained counselors.

Part-time counselors who also do some teaching, however, are more common. In the three Chicago municipal junior colleges, with enrollments of approximately 3,700, 2,900 and 1,600, each has a full-time director of personnel. Wright has 12 half-time placement counselors; Woodrow Wilson has 12, each spending one-third time; and Herzl has 14, each spending two-sevenths time. In the latter institution 100 students are assigned to each counselor on a basis of five hours per week. Sacramento Junior College, California, with almost 3,000 students, has a full-time dean of counseling and six counselors, each devoting three-fifths time to guidance. The Junior College of Kansas City, Missouri, with 1,600 students, has only the half-time services of three counselors. Mars Hill College, North Carolina, with 800 students, has the equivalent of two full-time counselors. Virginia Intermont College has the equivalent of six full-time counselors for 365 students.

Full-time counselors were reported for 17 per cent of the very small private junior colleges and for 18 per cent of the medium-sized ones. They were reported, however, for only 5 per cent of the small and 4 per cent of the medium-sized public institutions.

At Texarkana Junior College, Texas (public), with less than 200 students, there is a director of student personnel, who devotes two-thirds of his time to the work, and 12 instructors, each of whom gives one-fifth time. At Kemper Military School, Missouri (private), each instructor gives not less than 15 minutes of educational guidance to each of seven students weekly. In addition, there is a visiting vocational counselor for three weeks each year—an unusual feature. Somewhat the same plan is found at Gulf Park College, Mississippi, where, in addition to other methods, a vocational specialist spends a week on the campus in the fall meeting the students in various groups and classes as well as individually.

On the other hand, a public junior college with more than 500 students reported only three instructors devoting any time to guidance, their combined activities amounting to less than one-fourth the time of one man. One-third of the public junior colleges and one-fifth of the private ones report total time devoted to guidance work as less than equivalent of one man on full-time.

Average number of equivalent full-time individuals devoting attention to guidance for the institutions of different size are as follows:

	Public	*Private*
Total	**1.9**	**1.6**
Small	0.8	1.3
Medium	1.3	1.8
Large	2.6	1.3
Very large	4.6	—

For institutions of approximately equivalent size, the privately controlled junior colleges have distinctly more time given to guidance procedures than do the publicly controlled junior colleges except in the case of the "large" institutions.

Information about individual students. The junior colleges were asked to check any of nine suggested types of information about individual students which is available to counselors. Where tests were involved, their names were requested. Results for the 271 junior colleges are summarized in Table XIX.

Table XIX. INFORMATION ABOUT INDIVIDUAL STUDENTS AVAILABLE AT 271 JUNIOR COLLEGES

Information	Total Number	Percentages		
		Total	Public	Private
Number of institutions	**271**	**271**	**144**	**127**
Written statement of vocational ambition	176	65	66	64
Written statement of educational plans	165	61	60	62
Mental test score	198	73	68	79
Achievement test scores	118	44	43	44
Vocational interest test rating	81	30	36	23
Personality test rating	86	32	33	31
Special ability test rating	42	15	13	18
Other test scores	100	37	35	40
Other information	121	45	40	50

The extent of objective information indicated by these replies is encouraging but far from satisfactory. It is noteworthy that no significant differences appear between the publicly and privately controlled junior colleges. Less than two-thirds of the reporting institutions secure from their students written statements of vocational ambitions or educational plans. Less than half of the institutions have any of the specific types of test data suggested, except in the case of a general mental test, where the proportion rises to almost three-fourths. In many of the colleges, too, in which vocational interest or personality rating is reported, it is specified that such ratings are not available for all students, but only for limited groups or for special cases. The discovery of special interests, aptitudes, and abilities undoubtedly is an important element in any effective guidance plan, particularly if it is to function satisfactorily in pointing out possible and desirable terminal and semiprofessional fields of activity. In only a few institutions, however, is there a well-rounded program. This statement is substantiated by a consideration of the total number of the nine items which were checked by the different institutions, as summarized in Table XX.

Table XX. Number of Items Checked by Each of 271 Junior Colleges

Number checked	Total	Public	Private
Junior Colleges	**271**	**144**	**127**
9.	9	5	4
8.. ..	18	13	5
7....	16	7	9
6.	33	15	18
5 . .	33	14	19
4.. . .	45	20	25
3.	36	17	19
2 .	43	32	11
1..	23	15	8
0.....	15	6	9
Average	4.0	3.9	4.2

Less than one-tenth of the institutions have as complete a program as is indicated by eight or nine items. The average is only four. Almost one-third of the institutions reported two or less, not necessarily involving any test information whatever. The record of the private junior colleges is only slightly better than that of the public ones.

Many of the smaller institutions reported that testing is unnecessary because the faculty are so well acquainted with their students that they know their abilities adequately through less formal means. Whether this is sometimes only rationalization of existing practice may be questioned. One is tempted to inquire whether no classroom tests or examinations are used in these same institutions. One small private junior college reported: "Individual interviews have proven to be very satisfactory. We have tried various types of tests, but are not satisfied with those we have used." One of the best distributed and comprehensive testing programs, however, was found in another private junior college with an enrollment of less than 90. On the other hand, a public junior college of 235 students reported frankly: "Lack of funds makes it impossible for us to give more tests." One of the largest and best-known of the public junior colleges in the country is forced to finance the major part of its testing program through the sale of "special" lead pencils to the students taking the test at 10 cents each!

Westbrook Junior College, Maine, reported experimental work with prognostic tests designed to predict success in the secretarial field. On the whole, however, there were very few reports that indicate any outstanding work being done to determine probable aptitude and success for particular semiprofessional fields.

No effort was made to determine the extent to which the information reported as available was being used actually in student counseling. It is to be hoped that the following brief statement submitted by Hardin Junior College, Texas, describes a situation more frequent than is probably the case:

> The chairman of the faculty orientation committee has prepared a cumulative record of all tests given and, on basis of individual profiles secured from these scores, holds individual conferences with students to study any vocational aptitudes indicated on them. These cumulative records also are available to any teacher or administrator.

Tests used. It is impossible to give any statistical tabulation on frequency of use of different tests. Often they were named inadequately —Iowa test, Otis test, Thurstone test, Cooperative tests, etc. The same test, too, was given often under three or four headings by different institutions.[2] Some of the mental tests probably were given in the elementary or high school and only scores reported for college use.

In the mental test field the American Council on Education Psychological Examination for College Freshmen was by all odds the most frequently mentioned—by about one-third of the public and one-half of the private junior colleges. Otis, Terman, Army Alpha, and Thorndike tests were mentioned by much smaller numbers. The new Thurstone Test of Primary Mental Abilities is used in a few cases.

---

[2] A careful and detailed check list would probably be necessary if accurate information on type and frequency of use of tests were to be secured.

Under the head of "achievement tests" various Iowa tests—high school content, placement tests, silent reading, etc.—were mentioned most frequently. There is considerable use, also, of the different cooperative tests of the American Council on Education.

In the vocational interest field, the Strong Vocational Interest Blank has almost no rival. It was reported by about one-fourth of the institutions, although often it was stated that its use is optional.

In the personality and other fields, frequent mention is found of the Bernreuter Personality Inventory, Bell Adjustment Inventory, and Wrenn Study Habits, but in no case are these used by more than about one-tenth of the reporting institutions.

It may be helpful to report the actual tests used in a few selected institutions, of different types and sizes.

Valley Forge Military Academy, Pennsylvania (private; men; 86 students). American Council Psychological Examination, Thurstone Test of Primary Mental Abilities, Cooperative English Test, Cooperative Test of Literary Acquaintance, Strong Vocational Interest Blank, Bernreuter Personality Inventory, McQuarrie Mechanical Aptitude Test, O'Connor Free Association Test, Stanford Scientific Aptitude Test, Rogers Physical Capacity Tests, ROTC Physical Examinations.

Texarkana Junior College, Texas (public; coeducational; 190 students). American Council Psychological Examination, American Council Cooperative Tests, Strong Vocational Interest Blank, Bell Adjustment Inventory, Kimber-Tyler Library and Study Skills Test, American Council Contemporary Affairs Test.

William Woods College, Missouri (private; women; 313 students). American Council Psychological Examination, Otis Self-Administering, Army Alpha, Iowa series, American Council Cooperative series, Strong Vocational Interest Blank, Cleeton Vocational Interest Blank, Bernreuter Personality Inventory, Bell Adjustment Inventory, O'Connor Finger and Tweezer Dexterity Test, Minnesota Clerical Aptitude Tests, McAlroy Art Test, Seashore Measurement of Musical Ability, Nelson-Denny Reading, Iowa Placement, Iowa Silent Reading.

Los Angeles City College, California (public; coeducational; 6,687 students). American Council on Education Psychological Test for College Freshmen, Iowa Silent Reading Test, Strong Vocational Interest Blank, Bell Adjustment Inventory, Stanford Scientific Aptitude Test, other special tests on occasion.

Green Mountain Junior College, Vermont (private; coeducational; 284 students). American Council on Education Psychological Test for College

Freshmen, Thurstone Test of Primary Mental Abilities, Cooperative English Test, O'Connor Worksample 95 in English vocabulary, Cooperative General Culture Test, Strong Vocational Interest Blank (for men), Cleeton Vocational Interest Inventory (for women), Bell Adjustment Inventory, Iowa Silent Reading Test, S.M. Social Usage, Tyler-Kimber Study Skills; Seashore, Dykema and Oregon musical aptitude tests; Seashore, McAdory, Knauber, Lewerenz, and Varnum art tests; Moss-Hunt nursing, teaching, law, engineering, mechanical, clerical, selling, and other ability tests. Also high school transcript, application for admission, health background blank, physician's examination blank, and rating scales.

Bethune-Cookman College, Florida (private; coeducational; Negro; 244 students). Henmon-Nelson Test of Mental Ability, Clapp-Young English, Clapp-Young Mathematics, Strong Vocational Interest Blank, Bell Adjustment Inventory, Inglis Vocabulary, Iowa Silent Reading, Tyler-Kimber Study Skills.

Information on occupations. The next question sought data on four suggested methods of aiding students to obtain information on occupations. Replies are summarized in Table XXI.

Table XXI. METHODS OF AIDING STUDENTS TO OBTAIN INFORMATION ON OCCUPATIONS REPORTED BY 271 JUNIOR COLLEGES

Method	Total number	Percentages		
		Total	Public	Private
Junior Colleges	**271**	**261**	**144**	**127**
Provision of course or courses exploratory of the principal occupational fields	39	14	13	16
Provision of regularly scheduled guidance or orientation course which includes extensive consideration of occupational opportunities	88	33	33	32
Requirement that each student make a study of the ability and training needed and the jobs available in his chosen occupational field	49	18	16	20
Other ways in which students are aided to obtain information on occupation	172	64	66	61

Almost half of the junior colleges reported some type of organized courses. One-seventh of the institutions reported special occupational exploratory courses; one-third include extensive treatment of the field in a more general orientation course. Numerous "other ways" were mentioned, the most frequent ones being various types of library material and service, field trips and inspections of business and manufacturing plants, assembly programs, and cooperative study-work programs (see Chapters XI and XIII). Occasional mention was made also of one- to three-day guidance or career conferences or vocations days. Freshman week programs were reported in only a few cases. Weber College, Utah, makes effective use of a preregistration period extending over most of the summer. Scottsbluff Junior College, Nebraska, has provided a special "vocational clinic" through the efforts of the local Kiwanis Club Vocational Guidance Committee. The Chicago municipal junior colleges have united in the establishment of a single Bureau of Occupational Research which assembles a mass of information regarding local commercial and industrial needs and opportunities, and disseminates it to those in charge of counseling activities in the three day and three evening junior colleges in the city. Pasadena Junior College, California, publishes a special vocational guidance magazine for its students.

Job opportunities. The next question read as follows: "As part of your guidance program do you collect information on job opportunities in the area from which your students come (local, state, regional, or national) in any systematic way? If so, describe methods of obtaining information and the nature of the information collected." To this question 99 junior colleges (37 per cent) answered "Yes." The proportion among the public institutions was much higher (45 per cent) than in the private ones (27 per cent). Methods included interviews with prospective employers, special committees, search of trade and professional journals, cooperation with local or state employment services, etc.

Follow-up studies. The last question in the inquiry asked whether any follow-up studies had been made, either of students who had completed the junior college or of students who had dropped out before graduation; and if so, to give various details regarding these studies. A brief summary is given in Table XXII.

Many of these "studies" are evidently quite brief and scanty. Only a dozen have been published, and some of them in very brief form. Often the studies are limited to obtaining reports on grades and failures of graduates who have entered higher educational institutions. Four or five masters' theses have attempted somewhat more completely to make follow-up studies of all students, both transfer and terminal. Only two or three are devoted exclusively to "dropouts."

Sacramento Junior College, California, has made one study of drop-outs and another of 255 graduates and nongraduates who went directly into the vocational field. Louisburg College, North Carolina, has sent questionnaires to all drop-out students. Weber College, Utah, has followed up all terminal students going into retail business for the past three years. Evidently there is a distinct field for many additional studies which will secure a variety of significant information regarding students, both graduates and drop-outs, who do not continue their formal education beyond the junior college.

Table XXII. Follow-Up Studies Reported by 271 Junior Colleges

Question	Total Number	Percentages		
		Total	Public	Private
Junior Colleges	**271**	**271**	**144**	**127**
Follow-up studies made	101	38	34	41
Forms in which available				
Published	12	4	6	3
Unpublished	48	18	19	16
Filled-out questionnaires	24	9	6	13
Other	11	4	1	7

Ten New England junior colleges in 1939 united in follow-up studies of more than 3,000 of their graduates over a seven-year period. Occupational destinations of some 1,500 nontransfer students were tabulated. Walker in 1936 and West in 1938 published brief follow-up studies of students and graduates of the public junior colleges of Mississippi.

Fullerton Junior College, California, in 1940 reported a five-year detailed follow-up study of its students in the field of business education. Coffeyville Junior College, Kansas, in 1940 obtained data for studying the opinions of students who dropped out of college.

The most extensive and recent study of drop-outs was made by Dr. Louise Snyder at Los Angeles City College in 1940, based on a study of almost 3,000 students. Williams in 1935 at Los Angeles Junior College summarized replies to 20 questions answered by 285 graduates of semiprofessional courses. This is probably the most detailed effort to evaluate the success of semiprofessional curricula by this method.

Thompson at Colby Junior College, New Hampshire, in 1939 published a monograph reporting a follow-up study of secretarial graduates over a period of eight years. Other studies of nontransfer students or graduates or both were made in earlier years at Citrus, Chaffey, San Bernardino Valley, Sacramento, and San Mateo junior colleges, all in California.[3]

---

[3] For specific reference to place of publication of most of the studies mentioned on this page and abstracts of their contents, see L. E. Engleman and W. C. Eells, *The Literature of Junior College Terminal Education,* American Association of Junior Colleges, Washington, D.C., 1941, entries 688 to 709a inclusive.

Chapter XI

THE COMMUNITY AND TERMINAL EDUCATION

IN THIS CHAPTER five aspects of the community and terminal education will be considered—the nature of the community, the nature of the clientele, community surveys, community committees, and cooperative plans of work and education.

Nature of the Community

The first question on the *Information Blank* asked each institution to check a characterization of its students in case one-fourth or more of them were in an area which might be classified as primarily industrial, residential, or agricultural. Results from 254 junior colleges are summarized in Table XXIII.

Table XXIII. Nature of Communities Served by Junior Colleges

Characteristic	Number of junior colleges		
	Total	Public	Private
Industrial	30	20	10
Residential	46	16	30
Agricultural	56	31	25
Industrial, Residential	37	20	17
Industrial, Agricultural	28	16	12
Residential, Agricultural	47	27	20
Industrial, Residential, Agricultural	10	7	3
	254	137	117

About half of the junior colleges are located in communities which are prevailingly industrial, or residential, or agricultural. It is evident that the problem of providing terminal curricula particularly suited to local needs is much simpler in such communities than is the case where the same institution serves groups from two types of community. The situation is complicated still further, of course, unless the institution is very large, in the case of the 10 junior colleges which reported all three types of community served simultaneously.

Nature of the Clientele

Information was sought also on parents' occupation—professional service, business, unskilled labor, skilled or semiskilled labor, and farming—by asking that each group be checked in case it included parents of one-fourth or more of the students. To simplify presentation, answers have been combined into three categories as shown in Table XXIV.

TABLE XXIV. PREVAILING OCCUPATIONAL FIELDS OF PARENTS SERVED BY JUNIOR COLLEGES

Field	Number of junior colleges		
	Total	Public	Private
Professional-business	41	4	37
Labor	16	15	1
Farming	13	7	6
Professional-business, Labor	64	40	24
Professional-business, Farming	41	21	20
Labor, Farming	30	15	15
Professional-business, Labor, Farming	52	35	17
	257	137	120

Marked differences are noted in Table XXIV between publicly controlled and privately controlled junior colleges. The privately controlled institutions have a near-monopoly on clienteles that are composed prevailingly of the professional and business classes, while the publicly controlled ones have a similar monopoly in the labor field. Again, it may be observed that the problem of devising and offering suitable terminal curricula is considerably easier in the case of the first three groups in Table XXIV than in the last four. Unlike the single class uniformity, however, noticeable for half the institutions in Table XXIII, such single class uniformity is true of only about one-fourth of the institutions included in Table XXIV, even when the professional and business groups are combined in one.

Community Surveys

Information secured. Obviously the administration and faculty of a junior college need a much more extensive knowledge of their local community,[1] whether large or small, than is given by the simple background information afforded by such questions as have been summarized in Tables XXIII and XXIV, important as they are as a beginning. The second question in the *Information Blank,* therefore, was designed to find to what extent such additional information had been secured as a basis for planning terminal curricula suitable to local needs. It read: "Has your institution or another local agency made any systematic surveys of the community served by your college—of its economic organization, its occupational needs, the employment of its people, its probable future development?" No effort was made to define the word "survey" which unfortunately is used very loosely in the educational field as well as in the broader social field. In another connection the writer has defined a "survey of higher education" as follows:[2]

---

[1] It is evident that for many private junior colleges and some public ones with state, regional, or national rather than local clienteles the word "community" must be given a somewhat broader meaning. A footnote on the *Information Blank* read: "The word 'community' is used in this blank in a very broad sense. Please interpret it as having to do with

> A survey of higher education requires a scientific collection and examination of pertinent data, prevailingly if not exclusively objective in character, concerning a specific problem or problems, systematically presented and constructively interpreted with a view to improvement of the institution or institutions or phase of higher education with which it deals.

It is to be feared that many of the "surveys" reported would scarcely meet the requirements of such a definition as this. The question was broadly worded intentionally, however, so as not to exclude any study or local effort that possibly might be reported. If later a handbook on making such surveys is developed, as is hoped may be the case, the experience of those institutions, which have made really comprehensive and useful scientific studies and have interpreted their findings in terms of their own institutional problems, can be isolated easily and their findings and methods utilized.

A total of 64 "surveys" were reported—44 from public junior colleges, 20 from private junior colleges, or about one-fourth of the reporting institutions. The institutions listing them, located in 25 states in all parts of the country, are given below. From a consideration of the frequently scanty data reported concerning these studies, the writer would estimate that not over half of them deserve the name "survey." Even so, it is decidedly significant that even this

---

the *geographical area* from which most of your students come, whether local, state, regional, or national, if they come from all economic levels; or as having to do with the *class of people* from which they come, if they come from only one or two levels."

[2] W. C. Eells, *Surveys of Higher Education,* Carnegie Foundation for the Advancement of Teaching, New York, 1937, p. 6. For discussion of various definitions and characterizations of the term "survey" see same volume, pp. 3-7.

number of relatively careful scientific studies have been made as a basis for curriculum adaptation to local needs.

In some cases these studies have been simply high school or junior college class projects; in others, the work of junior college faculty members alone or in cooperation with local organizations; in others outside agencies have been entirely responsible; in a few cases such surveys have been the basis of masters' or doctors' theses.

Surveys Reported by Public Junior Colleges

Albert Lea Junior College, Minnesota. General study by commercial department of local high school.

Altus College, Oklahoma. College is tabulating employees used by all businesses in the city and general qualifications required. Begun in 1939 and still in progress, using part time of dean of the college.

Armstrong Junior College, Georgia. Very thorough survey made of Savannah with aid of NYA in 1938.

Bartlesville Junior College, Oklahoma. Coordinator of diversified occupations has recently made an occupational survey.

Bay City Junior College, Michigan. Survey in progress under WPA director of adult education.

Boise Junior College, Idaho. Surveys made through advisory committees of businessmen working with terminal departments of the junior college. Particularly satisfactory results in forestry and in business.

Brainerd Junior College, Minnesota. House-to-house canvass when the junior college was organized in 1938.

Burlington Junior College, Iowa. Survey of occupational needs and employment opportunities made in 1939. Results showed a need for training in distributive occupations as well as conventional vocational training offered. Also age of entering employment was found to be higher than the average age of high school graduates, indicating need for further maturing of the student in junior college.

Carbon College, Utah. Visit is made to each coal mine, to different unions and operators, and data tabulated showing number employed in each occupation. Ages, yearly turnover, and future employment needs are tabulated.

Coalinga Extension Center, California. Surveys are made quite often by various oil corporations, but future developments change with each new discovery. Data include economic situation, employment, and development of known resources.

Dunbar Junior College, Arkansas. Federal Writers' Project completed in 1940 "Survey of Negroes in Little Rock and North Little Rock, Arkansas."

Dixie Junior College, Utah. Vocational groups made survey in three sizes of distributive industries of number of office and non-office employees. Also determined number and age of carpenters.

Chicago City Junior Colleges. The Bureau of Occupational Research of the City Board of Education makes continuous surveys of occupational trends, opportunities, and needs for the use of all of the Chicago junior colleges.

Edinburg Junior College, Texas. Survey made last year by State Department of Vocational Education in conjunction with the school systems of the area.

Estherville Junior College, Iowa. Occupational survey of community, securing information on number and type of jobs, tenure, salary, demand, educational requirements, experience required, sources of supply, opportunities for advancement, personality traits desired, office machines used, job turnover, etc.

Eveleth Junior College, Minnesota. A doctoral dissertation at University of Minnesota on population and occupation trends. A survey of new industries and amount of iron ore deposits yet available.

Fordson Junior College, Michigan. "This is a one-industry town. The Ford Motor Company dominates the situation and we know what they want. We have communicated with the other smaller industries and professional people and have mapped courses as they indicated a need."

Fullerton Junior College, California. City survey in 1938 reached every institution, occupation, and profession in which people were engaged.

Georgia Southwestern College. No details given.

Glendale Junior College, California. Survey of occupational distribution and occupational choices of students and relation to present occupations of their fathers.

Gogebic Junior College, Michigan. Office practice class made survey in 1939 of 150 business offices in Ironwood, employing 140 women and 45 men, to determine number employed in the city and types of work performed.

Hardin Junior College, Texas. Survey made in 1937 to determine need for vocational education by State Board for Vocational Education with aid of many local men. Shows number of employees, annual turnover, and probable needs in eight types of vocations and industries.

Jackson Junior College, Michigan. Board of education survey, directed by Dr. A. B. Moehlman of University of Michigan, in 1940.

Kilgore College, Texas. Survey made by head of vocational division of State Department of Education and local man employed by the college.

Modesto Junior College, California. Several surveys of business and of agricultural industries in the local county.

Monett Junior College, Missouri. High school class in American problems, under direction of principal, has made survey of job possibilities.

Oceanside-Carlsbad Junior College, California. Head of commercial department has made survey of all possible jobs for students.

Pasadena Junior College, California. Survey of business opportunities in Pasadena made soon after organization of junior college in 1924. Occupational survey made by instructor in business in 1930. Another survey now in progress by one of counselors.

Phoenix Junior College. Arizona. Survey being made by Arizona State Teachers College at Tempe.

Pomona Junior College, California. No details given.

Pueblo County Junior College, Colorado. WPA survey. Machine survey.

Ranger Junior College, Texas. Survey in 1938 by two instructors to discover occupational needs and opportunities and probable incomes in various types of work.

Riverside Junior College, California. Survey made several years ago by commercial department of local high school. Survey now in progress through joint effort of board of education, chamber of commerce, and State Employment Service.

Rochester Junior College, Minnesota. Systematic survey made in 1926 prior to organization of the medical-secretarial course.

Sacramento Junior College, California. Data secured by committee of community leaders plus information on industries from chamber of commerce.

Salinas Junior College, California. California Employment Service is making continuing survey.

Salinas Evening Junior College, California. Door-to-door canvass five years ago to find persons' interests; also contacted business firms. Trades and industries coordinator checks yearly with labor and employer groups; uses advisory committee to help get picture. Distributive education coordinator is listing number of employees, turnover, part-time help, etc., in business firms.

Stockton Junior College, California. Survey now in progress.

Texarkana College, Texas. Survey now in progress.

Weber College, Utah. Faculty 1939-40 made studies of job opportunities, cooperative program in business, and occupational survey. Charts made in 1940 representing distributive trades survey.

Webster City Junior College, Iowa. Class in retailing made survey of all business enterprises in the town. Class in government studied city and county government.

Worthington Junior College, Minnesota. Survey of business establishments prior to establishment of general business and secretarial curricula.

Wright Junior College, Chicago. Study of the Wright Junior College community. See also Chicago City Junior Colleges, above.

Surveys Reported by Private Junior Colleges

Averett College, Virginia. Chamber of commerce and junior chamber of commerce planning a survey for the near future.

Bacone College, Oklahoma. "Our clientele is the American Indian population of the United States. The Federal Bureau of Indian Affairs has made various local and general studies of aspects of Indian life and development."

Campbell College, North Carolina. A brief study based on the outline furnished by the Cooperative Study of Secondary School Standards.

Centenary Junior College, New Jersey. Survey made in connection with organization of the college in 1929.

Columbia Junior College, Maryland. Doctoral dissertation based on study of all Adventist colleges and supporting communities made in 1938 by T. W. Steen.

Conception Junior College, Missouri. Survey made by sociology class, 1940, of occupations and backgrounds of residents of community.

Essex Junior College, New Jersey. Types of occupations of parents summarized.

Goddard College, Vermont. WPA and County Farm Bureau have made an extensive study of the region.

Grays Harbor Junior College, Washington. Cooperative survey in progress by chambers of commerce of Aberdeen and Hoquiam and the local public utility district.

Green Mountain Junior College, Vermont. Survey was begun last year and will be continued until all necessary information is secured.

Junior College of Commerce, Connecticut. Survey by chamber of commerce.

Lasell Junior College, Massachusetts. No details given.

Lees-McRae College, North Carolina. Partial survey made of economic-sociological problems.

Messiah Bible College, Pennsylvania. Dean of the college spent 15 months covering the constituency from which the college draws its students. Large volume was compiled, giving detailed information. Whole territory is covered about every three years. A large percentage of the constituency is rural and mostly of the working class.

Morris Junior College, New Jersey. Community surveys by chamber of commerce, other business organizations, local historians, and WPA group. Morris Junior College bases its curricula on past six years of experience with its students.

Portland Junior Technical College, Maine. 300-page survey made of business improvement possibilities of Port of Portland. Conclusion: new industries must be developed that can fit profitably local advantages.

St. Mary's Female Seminary-Junior College, Maryland. Information gathered on occupations of parents of students and type of community in which they live. Used as basis for faculty meeting discussions.

Scranton-Keystone Junior College, Pennsylvania. Survey of youth status of Scranton high school graduates. Occupational survey sponsored by Scranton school district, Kiwanis Club, junior chamber of commerce.

Tennessee Wesleyan College. Survey made in 1938 by curriculum committee of the faculty.

Wyomissing Polytechnic Institute, Pennsylvania. Survey of all industries is continuous. Weekly conferences are held with representatives of cooperating companies, but no reports are prepared.

Cooperating Committees

No systematic effort was made to obtain the names of institutions which have found it advantageous to make use of local cooperating committees and advisory boards to assist them in setting up terminal curricula and in placing graduates from such curricula. Pioneer work of this type has been done by Los Angeles City College. Important examples showing different variations in practice are found also at Scranton-Keystone Junior College, Pennsylvania; at the Junior College of Connecticut; at Boise Junior College, Idaho; at San Mateo Junior College, California; at Salinas Evening Junior College, California; at Modesto Junior College, California; and at Pasadena Junior College, California.

Cooperative Work Plans

A considerable group of junior colleges have developed some type of study-work cooperative plan with business and industry in the community. The so-called "cooperative plan" of education was first developed at the University of Cincinnati in the early years of the present century. In more recent years it has become widely known as the Antioch plan. Its first use in junior colleges seems to have been at Riverside Junior College, California.[3]

In some cases labor union opposition has been encountered. Thus Taft Junior College, California, reports that students formerly were placed without pay in local businesses but that the practice had to be given up on account of labor union opposition. On the other hand, San Mateo Junior College, California, reports that its cooperative program and advisory committees have been worked out in cooperation with the local Central Labor Council.

Chapter XIII is devoted entirely to reports of varied types of cooperative plans as they are working in a group of junior colleges. Some references are found also in Chapter XIV. A number of the illustrations in the photographic supplement also concern cooperative plans of work. No further consideration, therefore, will be given in this chapter other than to list the institutions in which such plans have been reported.

Alabama
Snead Junior College

Arizona
Phoenix Junior College

Arkansas
Dunbar Junior College

California
Bakersfield Junior College

---

[3] A. G Paul and H. H. Bliss, "Cooperative Part-time Work in the Junior College," *The Junior College, Its Organization and Administration* (W. M. Proctor, editor), Stanford Univ. Press, 1927, p. 141.

Chaffey Junior College
Coalinga Extension Center
Glendale Junior College
Lassen Junior College
Long Beach Junior College
Los Angeles City College
Modesto Junior College
Oceanside-Carlsbad Jr. Coll.
Pasadena Junior College
Riverside Junior College
Sacramento Junior College
Salinas Junior College
San Bernardino Valley Jr. Coll.
San Diego Junior College
San Francisco Junior College
San Mateo Junior College
Santa Rosa Junior College
Taft Junior College

Canal Zone
Canal Zone Junior College

Colorado
Pueblo County Junior College

Connecticut
Hillyer Junior College
Jr. College of Physical Therapy

Florida
Bethune-Cookman College

Georgia
Georgia Southwestern College

Idaho
Boise Junior College
Idaho, Southern Br. of Univ. of

Illinois
Blackburn College
Herzl Junior College
La Salle-Peru-Oglesby Jr. Coll.
Morton Junior College

Iowa
Ottumwa Heights College

Kansas
Chanute Junior College
Dodge City Junior College
Highland Junior College

Kentucky
Bethel Woman's College

Maine
Westbrook Junior College

Maryland
Mount St. Agnes Junior College
St. Mary's Female Sem.-Jr. Coll.

Massachusetts
Garland School
Lasell Junior College

Michigan
Fordson Junior College
Gogebic Junior College

Minnesota
Rochester Junior College
Worthington Junior College

Mississippi
Hinds Junior College
Meridian Junior College

Missouri
Christian College
St. Joseph Junior College
Stephens College
William Woods College

Montana
Northern Montana College

Nebraska
McCook Junior College

New Hampshire
Stoneleigh College

New Mexico
Eastern New Mexico College

North Carolina

Lees-McRae College
Pfeiffer Junior College

North Dakota

North Dakota State School of Science

Ohio

Giffin College

Oklahoma

Univ. Prep. School and Jr. Coll.

Pennsylvania

Hershey Jr. Coll. (Planned)
Scranton-Keystone Jr. Coll.
Williamsport Dickinson Sem.

Texas

Hillsboro Junior College
North Texas Junior Agric. Coll.

Utah

Weber College

Vermont

Goddard College
Vermont Junior College

Chapter XII

FINANCING TERMINAL EDUCATION

FOR THE MOST PART, no distinction is found in methods of financing the program of terminal education and the remainder of the educational program of the junior college. The most notable exception, of course, is in the case of the use of certain Federal funds. These will be discussed first, followed by brief consideration of other factors. Question 7 of the *Information Blank,* inquiring with reference to support of the vocational training program, yielded relatively little significant information.

Federal Aid

Smith-Hughes and George-Deen funds. The conditions under which Smith-Hughes and George-Deen vocational funds have been administered and are available to public junior colleges have been considered in Chapter III. So far, however, actual use of these funds is limited to less than a quarter of the publicly controlled junior colleges of the country, as shown by the list of such institutions printed in the appendix (pp. 247-48). The total amount of such aid granted to junior colleges annually is not easily obtainable from Federal records without excessive labor. A half dozen junior colleges in three states, however, did report the amount of such aid. This information is indicated in Table XXV together with total budgets as given in *American Junior Colleges:*[1]

Table XXV. ANALYSIS OF FEDERAL AID FOR VOCATIONAL COURSES IN SIX PUBLIC JUNIOR COLLEGES

Junior College	Total budget	Federal aid	Per cent Federal	Per cent of students semi-professional
Trinidad Junior College.......	$ 57,000	$ 8,000	14%	No data
Yuba County Junior College	48,000	5,100	11	70%
Glendale Junior College....	167,000	12,600	8	34
Modesto Junior College..	201,000	12,350	6	64
San Bernardino Valley Jr. Coll...	191,000	5,800	3	63
Phoenix Junior College	163,000	1,200	0.7	39
Average....	....	....	7%	54%

---

[1] Edited by W. C. Eells and published by the American Council on Education, Washington, D.C., 1940.

It is evident from Table XXV that the amount of Federal aid has been of little significance in the total budget of the six institutions considered. It has amounted to only 7 per cent of their total budgets although more than half of their students have been enrolled in various types of semiprofessional curricula, most of which are included under one of the four broad categories under which Federal aid is given—agriculture, business, home economics, and trades and industries. Since the Smith-Hughes law presumably is based upon a theory of matching of local and Federal funds, it is evident that there is room for considerable expansion of this work in the small number of institutions now participating in the Federal vocational program, also that there is an opportunity for a much larger number of institutions to have a part in the program.

Aviation funds. More than 200 junior colleges have been participating in the Civilian Pilot Training program of the Civil Aeronautics Authority.[2] Under this program each junior college receives from the Federal government $40 for each student who successfully completes the primary course and $60 for each student who completes the secondary course. With approximately 5,000 pilots successfully completing their courses in almost 150 junior colleges in 1940, more than $200,000 was granted during the year. In addition, the government gives $335 per student in the primary course and $750 to $850 per student in the secondary course to the flight instructor. In most cases this training is contracted outside the local junior college, but in some cases the local institution handles all the flight instruction as well, owns its own training planes, and secures its own flight instructors—probably a much better plan, educationally, where it can be achieved.

Other Federal grants. For several years the Federal government financed in whole or in part a number of temporary junior colleges[3] (including "Freshman" colleges) as WPA projects to take care of the needs of unemployed instructors as well as those of students. With one or two minor exceptions such aid has now been withdrawn. The institutions thus financed have either continued independently without Federal support or have ceased to exist.

The only other important example of Federal financing occurs in the case of the Canal Zone Junior College, administered under the War Department and supported by student fees and Federal funds. Even here, however, the Federal contribution in 1938-39 amounted to only 20 per cent of the entire income.

---

[2] For details see Chapter V, appendix pp. 232-34, and W. C. Eells, "The Civilian Pilot Training Program," *Junior College Journal* (November 1940), 11:125-30.

[3] Over 100 such temporary institutions were located in the single state of Michigan, with lesser numbers in several other states. See W. C. Eells, *The Junior College*, Chapter XIX, "Problems of Finance," for discussion of the more general aspects of the question.

State and Local Financing

In the case of all other publicly controlled junior colleges not mentioned in the preceding section, as well as of all privately controlled junior colleges, little if any significant difference is found in the methods of financing terminal curricula from that used for the remainder of the institutional program. In states like California where liberal state support is given (based in part on income from leases on Federal oil and mineral lands in the state), the semiprofessional curricula have been strengthened materially by such funds, as well as by generous local support. In all too many cases, however, even in publicly controlled institutions, the major part of the support still comes from student tuition, which, therefore, becomes the principal source of support for the terminal and semiprofessional courses. It is not surprising in such cases that often the ambitious student has a tendency to inquire why he should not pay his fees directly to a private proprietary school of business or technology, either local or of the correspondence type, particularly if this school makes glowing promises of assured immediate employment upon completion of its course of study. If and when the student, yielding to such allurements, finds that performance may not always coincide with promise, it may be too late for him to rectify his error.

In many of the privately controlled junior colleges, after the full tuition is paid for instruction, often an extra charge is made for terminal curricula, particularly in the fields of music, art, and home economics—a practice that is difficult to justify on any logical grounds, unless, perhaps in cases in which individual instruction is involved. Thus it is made hard, rather than easy, for a student of modest financial ability to take advantage of such terminal courses.

In some cases the work in technical fields is in whole or in part self-supporting. Automobiles or airplanes are taken in for repair on a commercial basis and the charges made for such work may pay part or all of the expenses of the shop except the salary of the instructor. Jones County Junior College, Mississippi, reported that its hosiery mill is operated entirely on a self-sustaining basis financially. Much of the agricultural work in many junior colleges nets a substantial income in cash or in produce for the operation of the institution. The same is true for printing as carried on in a few institutions.

Terminal education, particularly of a vocational character, especially in its initial stages, is likely to be somewhat expensive. Initial equipment, if adequate and satisfactory, may be quite costly, as indicated by data presented in Chapter VIII. In some cases higher salaries must be paid to secure competent instructors. Initial classes are likely to be smaller than in the academic courses, thus increasing still further the per capita costs. In connection with the present study, many institutions have written that they wanted to introduce more terminal curricula but were prevented by financial limitations. A major investigation of the entire subject of finance as related to terminal education is therefore in order, with resultant recommendations for adoption of policies, whether Federal, state, or local, which may serve to encourage rather than discourage curricular offerings best fitted to the needs of the 75 per cent of junior college students who probably will complete their formal education with the junior college.

Chapter XIII

BEHIND THE COUNTER THEY GO TO COLLEGE

EDWARD F. MASON*

A clerk who pleases intelligent customers.
A receptionist who inspires confidence in the office.
A machinist who treats his tools like a gentleman.
A foreman who can understand instructions and write reports.

Where can business and industry find such treasures? Shall executives seek in their own offices and shops or shall they look to the schools? Shall industries try to train such helpers themselves, regardless of the colleges? Or shall they expect the educational system to supply these workers ready-made?

The solution to the quest, now increasingly practiced, is for business and industry to take a share in the training, but for it to be supervised by an educational institution. Theory and principles are presented in classes, but business and industry provide the working experience that gives classroom theory its meaning.

The junior colleges especially are offering business and industry this opportunity, and they expect to offer it increasingly in the future. For the junior colleges deal with students who are through high school, who are still too young to be attractive to employers without further training, but who will not in most cases take the four years of college that would lead them into professional careers.

Suppose a young man in San Francisco wants to become a hotel clerk—eventually, perhaps, a manager. He could never, in a classroom, become even a clerk. Nor could he, even as an alert bellhop, without someone's instruction, master the intricacies of the business that would put him behind the desk.

But this young man can go to San Francisco Junior College and take a course in hotel and restaurant management that will cover the whole field of the hotel and restaurant business. And what he learns in class will be pointed up by experience behind the desk of a San Francisco hotel, and in its storerooms, kitchen, dining rooms, and accounting department.

---

* Director of Publication, American Association of Junior Colleges, 1940-41.

No effort has been made to write a formal report on cooperative work in each junior college offering it, but rather to select certain interesting aspects for which information was available in a limited group of institutions in order to present a graphic picture of this increasingly important correlation of education and occupation in what has come to be designated as the "cooperative plan of education." For complete list of institutions reported as following some phase of the cooperative plan see Chapter VI.

The theoretical and practical are combined. Classroom discussions cover such topics as the planning and maintenance of the hotel and restaurant plant, heating, refrigeration, ventilation, dining room and kitchen design, the purchase, preparation and serving of foods, meat cutting, stewarding, accounting, the front office, advertising and promotion, public relations, writing and public speaking, correspondence, taxation, social security, welfare and compensation laws, innkeepers' law, insurance, credits, and personnel administration.

Practical training is sponsored by an advisory committee representing the California Northern Hotel Association, the San Francisco Hotel Association, the San Francisco Restaurant Association, the Cooks' Association of the Pacific Coast, and other representatives of organized labor. In laboratory training in the hotels and restaurants of San Francisco, the student receives practical experience in purchasing, stewarding, kitchen, auditing, front office, advertising and promotion, credit, dining room, housekeeping, and engineering. These stations are filled both for summer practice and for laboratory training.

Eight members of the California Northern Hotel Association sponsor a tour of the state each year, with visits to leading hotels in various cities, for a selected group of advanced students. One enthusiastic Southern California operator invites two students each year to visit his hotel in Los Angeles, to study operating methods for one week as guests of the hotel.

A high point each spring is the luncheon for the California Northern Hotel Association. This luncheon is planned, prepared, and served entirely by the students. All instructors are seated at the time of service. And students may at the same time be serving a regular luncheon menu to 3,000 high school students in the two cafeterias of which they have charge.

Two-year courses in hotel and restaurant management are offered in at least five junior colleges of the country. At Rochester Junior College, Minnesota, students of business education operated the local Kahler Hotel for a day.

Industries and business firms from the Atlantic coast to the Pacific cooperate with junior colleges in business education. In Hartford, Connecticut, 29 stores and factories offer training facilities for students of Hillyer Junior College, the YMCA college of Hartford. Young women as well as young men are students. Some gain sales experience in large retail stores. Others serve business firms as stenographers and secretaries. Others go into the shops.

Under the Hillyer plan, each student alternates eight weeks of employment with eight weeks of classwork. While on the job, he draws wages, on the "earn as you learn" principle. At the end of the period his place is taken by another student, with whom he is paired.

Continuing this alternation for two years, each student spends six eight-week periods on the job and six similar periods in classes. By carrying a heavy schedule during the weeks in classes, he completes two years of academic work in addition to gaining the work experience.

Take the case of Benjamin A. Fornonzini, Jr., of Hartford, a Hillyer sophomore. Fornonzini was employed for a year on general repair and maintenance work around the plant of the Allen Manufacturing Company. At the conclusion of his first year he was promoted to operation of automatic machines, of which the Allen company uses many. Thus in two years' cooperative study he has had opportunity to learn much concerning general factory maintenance and operation, including techniques of feeding, repairing, and maintaining certain types of automatic machines. More important, he has learned about the people with whom he worked and the qualities needed for success in the industrial field. He has also completed two years of college education.

Retail stores of Boston and many other cities provide opportunities as saleswomen for students of Lasell Junior College, a women's junior college in Auburndale, a Boston suburb. Each student in retail training must work in a store in Boston or elsewhere during the three weeks before Christmas and at least eight Saturdays in the fall and spring. She must meet the store's employment director for an interview and must measure up to the store's requirements in order to secure and hold the position. For this reason she is not permitted to enter the course unless she qualifies according to the following standards:

She must have the requisite physique, being neither too short nor too heavy, and must be able to stand on her feet all day, and day after day. She must be honest, accurate, and dependable, with a genuine interest in people. She must learn to be diplomatic, tactful, and patient, and never give the impression that she feels superior to her fellow workers or to her customers. In spite of fatigue from long hours of work or being depressed in spirit because of severe criticism from supervisors, she must still be the gracious, helpful, alert saleswoman, calm and eager to serve. Her interest in her work must be such that she responds unquestioningly to any assignment by the department director, be it in the basement or in the marking room, in a department which is familiar or in one entirely unknown.

During the Christmas season of 1940, 75 Lasell girls thus were employed in 10 stores in Boston, four in New York, and others in Hartford, Cleveland, Cincinnati, Detroit, Newark, Worcester, Providence, Paterson, White Plains, Albany, and Waterbury.

How practical this experience can be was told by Betty Bell, a Lasell student:

> Imagine one poor salesgirl's surprise when, after combing the store for a certain dress to satisfy one woman's whims, she discovered that the dress was advertised Sept. 21, 1937!
>
> Then there was the girl who came back after lunch and upon being asked about a new cologne, offered to give her customer a sample. She didn't know that the atomizer was broken and that the perfume was going all over the woman's face, coat, and dress!
>
> And there was the one who found herself in a sea of unmarked stockings and three hurried customers, all in the first five minutes.
>
> Another surprise was the customer who gave the nightgown size when trying to find the right sweater for a Christmas gift. At the same counter a vase was shattered into a thousand pieces as the shopper wanted her armful of packages wrapped in with one little sweater.
>
> We were almost minus one girl, but she recovered from the shock of receiving a $100 bill and a $100 check all in the same morning.
>
> A little more on the serious and interesting side is the deaf and dumb woman who shopped every day; she carried a pencil and paper, and became one of the girl's regular customers. And then there was the day three bearded ladies were customers.
>
> Another girl was a heroine as she found a shoplifter, who was one of the regular employees at that.
>
> In the nature of thrills was the day Nancy Carroll came into the store and headed for a poor little Lasellite; both came through nicely! Also honored was our classmate who was asked to model at an employees' fashion show.
>
> A girl crawling around in the window after hours was having her first experience as a window dresser, and liked it, even though she did miss a 6 o'clock appointment at the college.

Each senior girl at Garland School, Boston, has the opportunity of a month of experience in her chosen field, in the last half-year before she graduates. These opportunities are made possible by a large group of cooperating commercial houses and public institutions, offering experience in salesmanship, fine arts, museum work, interior decorating, newspaper work, child care, hotel service, catering, and the like.

Stoneleigh College, New Hampshire, requires each student to carry a "winter project" in the recess from Christmas to the early part of February. In 1940, students held positions in metropolitan department stores and in studios of costume design. Many worked in offices or served as secretaries to business and professional men. Some were engaged in social work. Others were employed by commercial and portrait photographers. The contacts of the winter project period have led to permanent employment for many students.

At Goddard College, Vermont, a somewhat similar plan is found. Each student uses a six-weeks winter work period in December and January for tryout jobs.

At Vermont Junior College, located at Montpelier, every terminal student has actual employment for one month or more in the field of his choice; for example, in practical electricity, men work for the New England Power and Light Company; in journalism, they work on the Montpelier *Daily Argus,* and so on.

Retail merchants of Long Beach, California, have introduced a new variant into the training schedule. They wait until the student has completed a commercial course, either in Long Beach Junior College or in high school, and then give him a year's experience in a store. This apprenticeship or internship is administered under a plan arranged by the retail merchants' association with the school officials. Having completed his commercial or sales course, the student presents his record, letters from instructors, and application, at the retailer's office. If accepted, the student begins "going to school on the job." Larger stores often have the student work in a different department each month. He may begin in the shoe department, be transferred to the shipping room, have a turn at bookkeeping, and proceed through window dressing, stock handling, sales, credit, advertising, and promotion. He gains valuable experience, earns a small salary, and often finds, by the close of the year, that he has worked himself into a permanent job.

Stores, filling stations, and other selling agencies in Glendale, California, provide jobs for 10 hours a week for students in the course in supervised retail selling in Glendale Junior College. This course proceeds on the assumption that "the ideal way for a salesperson to develop skill after he has studied the theory of selling is to work at an actual selling job." The student spends part of his time in classes but must spend 10 hours a week in selling, to try out the methods he has learned. He is supervised on the job and is given an opportunity to discuss his problems with other class members and with the instructor. Members of this class have prepared a manual on selling, which has been published through aid of the Glendale Junior Chamber of Commerce.

Business houses at Tonkawa, Oklahoma, provide opportunity for students at the University Preparatory School and Junior College to work 15 hours a week at retail selling. This course was introduced in 1937 and meets the requirements of the George-Deen act of that year for cooperative retail sales training.

At Pasadena Junior College, California, prominent business men and experts in various fields deliver lectures as a part of the regular training course. Such topics are discussed as "Opportunities in Department Stores," "What the Insurance Field Offers to Youth," "What May Young People Find in the Field of Accounting," and "Streamlining Credits and Collections." Demonstrations of commercial products are given by leaders in the sales fields. Business leaders through their talks thus tie up actual business with the school.

In addition to these special lecturers, a group of well-known business men have formed an advisory council. Because these business executives know what they desire in their employees, they are able to advise with the school as to course content, equipment, and training methods. These and other business firms also give Pasadena students opportunities for practical training.

Conducting the course in merchandising apprenticeship is Mrs. Gladys Young, brought to the Pasadena campus from a position as personnel manager for Montgomery Ward and Company in Oakland. Students are specially selected, on the basis of background, personality, and intelligence. They draw their chairs around in a circle and their eyes sparkle at the brilliance and enthusiasm of the teacher. What they learn comes from actual experience, with theory thrown to the wind. The merchandising class is the only one they attend, 15 hours a week, and in the afternoons they put their learning to practice in regular jobs, which hustling Mrs. Young gets for them.

Business houses of Salinas, California, offer experience training in six-week periods for secretarial students at Salinas Junior College.

Graphic arts students of Riverside Junior College, California, are taken as apprentices by related trade groups. Other trade groups also have taken some apprentices. Each curriculum has a trade advisory committee.

Dodge City Junior College, Kansas, has a cooperative arrangement for secretarial students. Pueblo County Junior College, Colorado, is another that has a cooperative program.

Opportunities for job training vary from city to city, according to local needs. In San Francisco, for instance, it was discovered that 30,000 individuals were earning their livelihood from the insurance business, and that 18,000 of this group were women, with jobs ranging from statisticians, clerks, stenographers, and telephone operators, to those of agents and brokers.

President A. J. Cloud of San Francisco Junior College found that major insurance executives were interested actively in the possibilities for job training in this field. The San Francisco Life Underwriters Association appointed an advisory committee, consisting of nine of the most prominent life insurance managers in San Francisco, to help set up the course.

Insurance companies gave opportunity for well-qualified students to spend part of their time in selected downtown offices, and by the middle of the second year 20 companies had entered into this cooperative program.

"Because of the technical nature of the business," writes W. C. Marsh of the San Francisco Junior College faculty, "it has become apparent that mere wish for a position on the part of the student is no adequate basis for his possible incorporation into the insurance course. The training, especially for men, contemplates a technical type of education which requires intelligence of a high order, and the course of training for this group is calculated to prepare students not only for their immediate job but also for positions of greater responsibility as time passes."

San Francisco Junior College makes it a point to call in a committee of business and professional men, including representatives of organized labor, whenever entrance into a new field of vocational instruction is proposed. In planning its course in horticulture and gardening, the college consulted 25 landscape architects, nurserymen, gardeners, florists, and other specialists. Other committees were consulted in planning courses in paint technology and in oil station operation.

Modesto Junior College, California, has an automotive trades committee composed of garage owners and mechanics. Modesto also offers cooperative training in business education. Students spend 15 hours a week on the job, and 30 in school.

The central labor council of San Mateo, California, has cooperated with San Mateo Junior College in establishing a training program and advisory committees.

In Ogden, Utah, it was found that the average age of carpenters was 58, and that new carpenters could not be educated fast enough to replace the old master craftsmen who were dropping out. Weber College accordingly got the carpenters together, including the president and secretary of the local union, and organized an advisory committee for setting up a two-year course in carpentry in the junior college. This was not to be make-believe; it was to be real. They arranged for the class in carpentry to build a house, and for the class in electricity to wire it. When they found legal difficulties in the way, the advisory committee incorporated, bought a lot, had plans drawn, furnished each boy a set of tools, and put him to work. That "class" is now under way.

Weber College already has 22 instructors taken from industry, and it gives terminal courses in business, shorthand, typewriting, retailing, office machines, nursing, trade and industrial education, air conditioning and refrigeration, auto body reconditioning, automotive service and repair, carpentry, commercial art, general metals, machine shop, power machine operation, and welding.

The boys in the carpentry class are indentured as apprentices to local contractors, under union regulations, and in their two college years gain half the experience required to become journeymen. Through cooperation with the garment trade, Weber College trains students for apprenticeships in that industry. The college has similar arrangements with other industries.

All the oil companies operating in the area around Bakersfield, California, cooperate with Bakersfield Junior College, in giving opportunity for practical field work and demonstrations for the class in oil technology. Students visit the wells, studying the machinery and methods of drilling, with explanations by experts.

Customers take their airplanes for overhaul and repair to the shops of the North Texas Agricultural College at Arlington, Texas, and to the shops of the North Dakota School of Science at Wahpeton, North Dakota.

Many parents of junior college students think "terminal education is fine—for other people's children," says Principal J. L. McCaskill of Meridian Junior College, Mississippi. "But if a businessman will say to a student, 'You take a course in related training and I will employ you,' that is the best inducement," Mr. McCaskill adds. About 25 per cent of Meridian students are taking courses in diversified occupations leading to employment in local industries.

Farmers as well as business and professional men enter into the cooperative plan. In Hinds County, Mississippi, farmers cure their meat in a cooperative curing and cold storage plant conducted by Hinds Junior College at Raymond.

Cooperative part-time instruction is supplied at Modesto Junior College, California, by a large cooperative creamery, local farmers, and the agricultural extension service. During the past three summers all agricultural majors have been placed under supervision in jobs in creameries, on farms, or in fruit canneries if they were not gainfully employed on their own farms.

An advisory committee of 17 physicians in Montana, Colorado, Nebraska, California, Idaho, North Dakota, Wyoming, Texas, Washington, Kansas, and New Mexico assisted Northern Montana Junior College at Havre in planning a three-year course for medical secretaries.

Pennsylvania physicians provide office experience for medical-secretarial students at Scranton-Keystone Junior College, La Plume, Pennsylvania.

"Sometimes everything went along smoothly," reported one of these girls. "Bills, reports, case histories, and diets were typed with few erasures; dictation was taken without too much longhand intermingled; laundry and salesmen were sent on their way promptly. In regard to salesmen, however, I did run into the exception to the rule. It seems that one day one of those selling geniuses arrived to be greeted by my 'Sorry, but the doctor is out just now. No I don't know when he'll be back.' No sooner did the little white lie leave my lips than the doctor came strolling nonchalantly out of his office with some typing for me to do. As the salesman followed the doctor back into the office he threw me a look of perfect friendship. My face merely took on a delicate shade of pink."

This experience, between the student's freshman and sophomore years, helped her decide whether she could meet the strict requirements of the medical secretary's position.

Scranton-Keystone Junior College organized its medical-secretarial course with advice and assistance from a committee of physicians and surgeons. Similarly, in other fields, it has called on the advice of committees of lawyers, engineers, educators, businessmen, and ministers.

Doctors' offices and hospitals in Chicago give apprenticeships to medical-secretarial students from Herzl Junior College, a municipal institution.

Five hours a week are required in actual service in a dentist's office as part of the training for dental assistants at Los Angeles City College. This principle is also applied to students in the course for library clerical aides, so that they can receive credit for work done in a library. Los Angeles stores enable merchandising students to earn while learning. Public health students have a similar opportunity. And Southern California weekly and small daily newspapers give 10 weeks of internship in the spring to students who are finishing the Los Angeles City College course in technical journalism.

Students in journalism at Eastern New Mexico College run the beats of regular reporters on the Clovis *News-Journal,* the Portales *Daily News,* and the Portales *Tribune.*

Boise Junior College, Idaho, and Lassen Junior College, California, are among institutions conducting programs in forestry in cooperation with the United States Forest Service.

Practical experience in recreational leadership for students of St. Mary's Female Seminary-Junior College, Maryland, is obtained through cooperation with the schools and recreational projects in the county.

The Los Angeles school system is the largest employer of graduates from the recreational leadership course of Los Angeles City College.

"The time is apparently here when we must find youths for jobs rather than jobs for youths," says Dr. Rosco C. Ingalls, director of Los Angeles City College. "This situation is developing from industrial activity growing out of national defense needs. It is due, also, to current trends in business in the retail trade division, in electrical equipment fields, in low cost housing projects, as well as in other fields now attracting the consumer's increasing buying power."

Chapter XIV

PERSONAL OBSERVATIONS ON TERMINAL EDUCATION IN SELECTED JUNIOR COLLEGES

BYRON S. HOLLINSHEAD*

FROM FEBRUARY TO JULY, 1940, I had the rare opportunity of visiting 58 junior colleges, a number of NYA projects, some high schools, a few trade schools, and a half-dozen universities. The visits were made possible by a five-months leave of absence from my normal duties to act as consultant for the General Education Board of New York. I shall not apologize for using the first person throughout as the reports made on my trips were in diary form and a first-person account seems less stilted.

The institutions visited were selected after conferences with a number of people in the junior college field. While the institutions seen were, in general, outstanding junior colleges, there were many not visited which are doubtless as interesting and of as high a quality. Visits, of necessity, depended partially on a number of factors like accessibility and the requirements of schedule.

In most cases, I spent at least one day at each institution. This is not long enough to get any very comprehensive idea of the total work of a college, but generally it was sufficient to learn of outstanding contributions the institution was making, and to grasp fairly well the kind of work being offered in terminal courses.

Visits were completely informal, but usually followed a fairly definite pattern. The head of the institution was called upon first, both to get his ideas about terminal work and to seek his permission to attend classes and talk with instructors. Class and laboratory visits were quite informal and generally preceded visits with students and instructors. Everywhere I received a friendly reception and was given every assistance in getting information.

---

* PRESIDENT, Scranton-Keystone Junior College, La Plume, Pennsylvania; CONSULTANT FOR GENERAL EDUCATION BOARD, during spring of 1940.

Outline of plan for visits. Before my first visit I prepared a tentative outline as a reminder of things for which I was looking. While I would not use exactly the same outline if I were making such a survey again, the outline did serve a useful purpose in insuring a fair amount of comprehensiveness. The outline was as follows:

A. Community
  1. Type of community, i.e., rural, industrial, suburban, etc.
  2. Kind of industries in the community needing semiprofessional workers
  3. Needs of the community for semiprofessional workers other than industrial
  4. Needs of youth as set forth by the American Youth Commission

B. How Terminal Courses Were Devised
  1. Use of community committees
  2. Use of industrial surveys
  3. Use of professional groups
  4. Use of outside consultants

C. Type of Student Body
  1. Economic and social level
  2. Differentiation between students who take terminal courses and others—how accomplished—objective tests, economic status, etc.

D. Testing Programs
  1. What vocational tests are used
  2. How are the results of tests used
  3. What tests are needed
  4. What tests seem best for determining semiprofessional fitness

E. Guidance
  1. What methods of guidance are used
  2. How effective is the guidance
  3. Are community resources for guidance used
  4. Is guidance different for terminal students

F. Orientation of Students
  1. How is orientation accomplished
  2. What efforts are made to inculcate good work habits
  3. What about development of desirable attitudes—cooperativeness, etc.

G. Instructional Staff
  1. What training seems desirable
    a. academic
    b. industrial or practical

  2. What weight is given to experience in industry
  3. How are instructors kept "en rapport" with recent developments in their fields

H. Cooperative Programs
  1. Full-time cooperative program
    a. time intervals of study and practice
    b. methods of coordination
  2. Part-time cooperative program
    a. vacation periods
    b. use of practitioners in class work
    c. visits in community
  3. Do cooperative programs add to the effectiveness of terminal work

I. Facilities for Terminal Work
  1. General facilities in laboratories
  2. Special equipment
  3. Community resources

J. Methods of Instruction
  1. In what ways is the instruction different from the conventional
  2. Typical work as judged by class visits
  3. Use of visual aids and other nonbook methods
  4. Use of community resources

K. General Education
  1. What proportion of course is general education
  2. How is it different from conventional liberal arts courses
  3. What areas of knowledge does it cover
  4. What is student reaction to general education
  5. What efforts are made to prepare students for intelligent citizenship
  6. Is consumer education part of general education

L. Requirements for Graduation from Terminal Work
  1. Requirements for diploma
  2. How much of the diploma requirement is mastery, how much time-serving
  3. What part did employers play in determining graduation requirements

M. Placement
  1. Kind of services—how organized
  2. Vacation and part-time placement
  3. Use of cooperative program to aid placement
  4. Use of community committees
  5. Use of local and Federal employment agencies

N. Follow-up of Placement
  1. Does institution maintain its interest in graduates
  2. Does institution check evaluations of graduates by employers
  3. Does institution offer continuation courses for graduates

O. Evaluation Program—Administrative Organization for Evaluation
  1. Curriculum
  2. Instruction
  3. Community relationships
  4. Projects for faculty study
  5. Student participation
  6. Community and employer participation

P. General Remarks
  1. Unusual techniques
  2. Unusual personnel—and personnel in general
  3. Unusual facilities
  4. Unusual use of outside agencies

Meeting community needs. My questions about the kind of community, its main industries, and the status of its business enterprises usually began with the taxi driver who took me from the station to the hotel. As a group, taxicab drivers are quite well informed about the main industries of their cities and they possess considerable knowledge about local occupational possibilities.

One of the most interesting community developments in occupational terminal courses was found in San Francisco. The great community interest in the work of the San Francisco Junior College may be explained partially by the fact that the junior college, when I was there, had no regular home, but was holding classes and offering a great variety of curricula in over 20 centers throughout the city. Mostly, however, the splendid "esprit de corps" of the San Francisco staff is traceable to President Cloud who has brought together a capable and energetic faculty.

On my first day in San Francisco, I was taken to a luncheon for the hotel and restaurant management group. A large number of hotel people, who were members of a community committee for the hotel management curriculum, attended the luncheon which was served by students taking the course. Afterwards I talked with some of the hotel men who expressed great enthusiasm for the course offered and explained how they were giving part-time employment opportunities to the students registered. Students were not only working in hotels while attending classes, but they also worked in or visited hotels during vacation periods.

J. Graham Sullivan was coordinator of the restaurant and hotel division. Mrs. Hilda Watson and Ernst Hjorth were doing most of the essential occupational training. The college, through these faculty members, has worked with the labor unions since the course has been offered and has the backing of that important group.

In the evening of the same day, the college had a meeting of the apartment-house owners in San Francisco to get their interest and assistance in setting up a course the college was proposing to offer in apartment-house management. It was interesting to observe that the college proposed to offer such a course only after a community survey had been made and only after getting a group of apartment-house owners together to discuss the possibilities of such a course.

The courses at San Francisco in landscape architecture, insurance, police training, merchandising, and training for civil service are given all on a similar basis. Frequently, instructors in these courses are taken directly from employment in industry. In general, it seems safe to say that instructors of this type are more successful in teaching occupational courses than those who have a purely theoretical background.

Using consultants. In the development of terminal courses in various institutions, I was interested to find out what part had been played by outside consultants. I found that the work at Rochester Athenaeum and Mechanics Institute, New York, and at Stephens College, Missouri, had been influenced greatly by consultants called in to help with their programs.

Dr. W. W. Charters has been a regular consultant for Stephens College for a number of years. In developing the functional program at Stephens, Charters had more than 300 women college graduates keep diaries over a period of weeks "in which they recorded not only their activities, but also their problems and their very thoughts."[1] From these diaries, Charters developed seven areas of activities and problems, common to all women. The areas are communications, appreciation of the beautiful, social adjustment, physical health, mental health, consumer problems, and philosophy of living. The college has added an eighth area called "knowledge of science in terms of life needs."

Marriage and the family. I was quite interested to find out how the Charters program was working at Stephens College, so I visited a number of classes in subjects not common in the curriculum. One of the most interesting was a class Henry Bowman was conducting on marriage and the family. The girls in the class had recently seen "Gone With the Wind," and were discussing the character of Melanie. Questions revolved around the situation faced by Melanie and what steps she should have taken "to keep her man." Discussion on the part of the students was animated and occasionally dealt with quite fundamental human relationships.

---

[1] B. Lamar Johnson, "General Education in the American College," *Thirty-Eighth Yearbook,* Public School Publishing Company, Bloomington, Illinois, Part II, p. 128.

Reading. Another interesting class I visited was called "masterpieces in world literature." Mrs. Zay Sullens, who conducts this course, gives the girls a rather wide range of reading material and asks them to keep diaries on their reactions. Ordinarily, this would seem like a loose organization for a course, but in practice it seems to work rather well. The girls had really done considerable reading and discussed their reactions with intelligence. It was significant that by their own thinking they were arriving at conclusions which in the ordinary course would have been forced more or less upon them.

Guidance. Deans Shofstall and Johnson have worked out at Stephens College an excellent personnel system which functions quite adequately. Each dormitory counselor keeps an anecdotal record of students in her charge and does everything she can to get students to take responsibility for their own development. Most of the girls with whom I talked at Stephens College seemed to be quite conscious of the educational process they were going through. This is a much healthier attitude than the blind acceptance of the *status quo* which exists in a number of institutions.

Consumer education. As part of the functional program at Stephens College, a considerable amount of work has been developed in consumer education. Dr. John M. Castles is in charge of the work, which has been housed in an institute for consumer education provided by the Sloan Foundation. Courses in this field cover fairly adequately the usual basic materials of a beginning course in economics, in addition to the material given to make the girls intelligent buyers.

In almost every course at Stephens College, instructors are trying to make the teaching material as close to the experiences of the girls as possible. In addition to the functional emphasis in the classwork, the girls utilize community resources and take frequent trips to a considerable distance in order to improve their knowledge of the world about them.

Cooperative work. The Rochester Athenaeum also has had the advantage of utilizing outside consultants. On the day I visited the Athenaeum, Dr. Ralph Tyler was meeting with the faculty to discuss educational problems. The Rochester Athenaeum is somewhat unique in its program. Most of the courses given are planned to train students directly for specific occupations. In most of the courses students work part-time in industry and part-time at the Athenaeum. In some cases they are one month out and one month in. In other cases, they take classes for part of the day and work for part. In the evening program, students are working all day and taking courses in the evening.

Mr. Morecock, who is in charge of the electrical department, said that students who are on cooperative work seem to learn about as much in five months of study as students in the same course but not on cooperative work learn in seven months. He attributes this to a more serious purpose as a result of the work experience. In general, work experience would serve the purpose of providing maturity as well as motivation for the classwork.

Teaching "attitudes." One of the most interesting divisions at Rochester consists of the evening work under the direction of Calvin C. Thomason. Mr. Thomason directs courses in psychology and economics which are more successful in giving a training in attitudes than any other courses I visited. Part of the success of this training lies in the fact that each group is kept quite small and has as class leader one of its own number. The leader usually has taken the course the year before. He is, therefore, only one step ahead of the students. That fact seems to make for quite free discussion. The leader gives examples, called "thought detonators," from the texts provided by Mr. Thomason, and then the group discusses the illustration. The effect is that of a controlled "bull session." There is much discussion of attitudes and work habits in these courses and the tabulated results achieved by the men in them would seem to indicate that the inculcation of proper attitudes has been quite effective. I was told by students that those who took the work were retained by employers in slack periods and were given promotions much more rapidly during prosperous periods. Probably the best indication of the value of the courses is that employers frequently pay the cost of the course for employees who do creditable work.

Since the Institute is not accountable to any accrediting agency and falls within no particular pattern of the usual educational institution, it gives courses as it thinks best and without concern for a previously conceived pattern. The success of the Institute would seem to demonstrate that students are not concerned about credits and grades if they are convinced that the work they are getting is valuable.

At Rochester, work is given in a great variety of semiprofessions. Some of these are industrial chemistry, building construction, costume design, applied art, electricity, food administration, mechanics, photography, publishing and printing, and retailing. In each field, work opportunities are provided for each student taking the course. At the Athenaeum the work experience is regarded as an integral part of the student's education, and each employer is asked to keep a personnel record of the student's progress.

Testing and guidance. It is not only more expensive to give terminal work than the ordinary academic work but terminal work also requires a different approach to the problems of guidance. One of the best guidance programs I saw was at the Bakersfield Junior College, in California. Students at Bakersfield take the following tests on entrance: Thurstone Intelligence Test, Iowa Silent Reading Test, Wrenn Study Habits Inventory, Tyler-Kimber Study Skills Test, Bell Social Adjustment Inventory, and Michigan Vocabulary Test. These tests are not administered as a battery at the beginning of the college year, but are given one at a time at about six-week intervals during the year. After a test is given, one of the counselors meets with each student and goes over with him the aptitude and achievement indicated by his score. This function is in charge of Dean Grace V. Bird, who has made several significant studies as a result of her work.

One of the interesting terminal courses at Bakersfield is in aviation technology. For the courses in airplane engines, sheet metal work, and airplane construction, students are transported from the junior college to the airdrome.

NYA out-of-school project. Bordering the airdrome, there is an NYA out-of-school project. The boys on this project spend half their time doing work about the airport and the other half taking the junior college courses in the aviation department. The NYA provides a dormitory for these boys who are mostly from relief families. They are paid $30 a month for their work at the airport, the NYA deducts $19.20 a month for maintenance, and the junior college provides the related training. There is much to be said for this kind of cooperative arrangement.

Aptitude tests. Another important phase of the guidance of terminal students relates to testing. On my trip I did not find many places where a special attempt was being made to develop aptitude tests for specific semiprofessions. At the Opportunity School in Denver some work has been done in this direction. The Opportunity School uses the following tests to determine vocational aptitudes:

Interest Inventories
- Cleeton's Vocational Interest Blank: Forms for Women and for Men
- Strong's Interest Test
  - Form for Men
  - Form for Women
  - Form for Students
- Manson's Women's Interest Test
- Lufburrow Interest Locator
- Minnesota Interest Analysis

Clerical Battery
- Minnesota Vocational
- Thurstone Employment Clerical and Typing
- Stenoguage
- Blackstone Prognostic
- Clem's Commercial Education Survey
  - Junior Typing
  - Senior Typing

Music
- Kwalwasser Test of Musical Information
- Kwalwasser Musical Accomplishment
- Providence Inventory Test in Music

Art
- Meier-Seashore Art Judgment
- Kohs Block Design

Mechanical Ability
- Stenquist I, II
- Minnesota Paper Form Board Test
- Minnesota Assembly Test
- Minnesota Spatial Relations Test Board A & B
- I.E.R. Assembly Test for Girls
- McQuarrie Mechanical

Miscellaneous
- Blue Print Reading
- Aptitude Testing for Nursing
- Coxe-Orleans Teaching
- Moss Test for Ability to Sell
- Engle-Stenquist Home Economics Test

Manual Dexterity
- Packing Blocks Test
- Card Sorting Test
- O'Connor Finger Dexterity
- O'Connor Tweezer Dexterity
- Minnesota Manipulation Test

Personality Tests
- Rorschach Inkblot Test
- Bernreuter Personality Inventory
- OAS Personality Rating Scale
- Woodworth-Cady Emotional Stability Questionnaire
- Downey-Will Temperament Test
- Link's Inventory

Miscellaneous Tests
- Gates-Strang Health Knowledge
- Knowledge of Social Usage
- Clinical Forms: Personal and Family History

The procedure for developing new batteries for specific occupations at the Opportunity School is to make a job analysis of the requirements of a particular field. After this analysis has been made, the people in charge of testing draw up a battery which they believe will test the qualities needed. Then a group of successful practitioners in the field are called in and the battery is tried out on them. If they all make high scores, indicating that success in the field does depend on the qualities possessed by them, then the tests are standardized on this group, and persons desiring to take work in this field at the Opportunity School are tested by the battery which has been tried out on successful practitioners. Admittedly, the method depends on trial and error, but it seems to work about as well as any I saw.

Integration with community resources. Many of the institutions I visited were under the direction of a superintendent of schools, and students in the junior college, therefore, could use the laboratory and shop resources of high schools or trade schools in the same system. The work at Hershey Junior College, Pennsylvania, is geared not only to the public school system, but is integrated with all the other community resources in Hershey. This is possible largely because the various community institutions at Hershey are all under the control of the Hershey Chocolate interests.

The junior college is housed in the community building about one block from the high school. The community building contains an enormous number of facilities. On the first floor is a community library which is quite well equipped. On the first and second floors there are large lounge rooms for the community which are also used by the junior college students. There are swimming pools for both men and women. There is a gymnasium for men and women, handball courts, a dining room, a cafeteria, bowling alleys, a pool and billiard room with ping pong tables, a recreation room for dances and teas, a large theatre, and a small theatre for intimate stage productions and lectures. All these resources are available to junior college students and community members alike. It seemed to me to be a good thing to have adults and youth working and getting recreation together. Further, such an integration of interests materially assists in preparing young people for the responsibility of adult life.

One interesting development at Hershey is that boys from the Hershey Industrial School are now going on to complete their work in the junior college. Boys from the industrial school are orphans and live on farms outside the town. There are 49 of these farms serving the industrial school and the junior college. Each farm unit is administered by a farmer and his wife who give the boys a farm home with farm-home responsibilities. In planning this program, Mr. Hershey was trying to reproduce his own early environment. The farmers and their wives are selected carefully to provide a parental influence. Boys in the units get up early in the morning, do farm and house chores, go to the industrial school or to the junior college for the day, and then return home to do farm chores in the evening. Most of the farms are of the dairy type, and milk from the farms is used by the chocolate factory. All together there are over one thousand orphan boys living on these farm units and attending either the industrial school or the junior college.

Community dramatics. I saw another interesting type of community cooperation at the Armstrong Junior College, Savannah, Georgia. The Armstrong Junior College has developed what is called the "Savannah Playhouse," which is made up of members of the student body and interested people in the community. About four or five plays a year are put on by this group in the college auditorium which is well equipped for dramatics. Plays put on by this group have to run for five nights each to accommodate the crowds who come not only from Savannah but also from the surrounding area. Nearly every student gets into some phase of the dramatic productions, which are in charge of Stacey Kesch of the college staff. The playhouse combines the college interest in dramatics with the interest of what probably before was a community little-theatre group. People in the community are enthusiastic about the work and a real contribution has been made in improving community culture in the drama. The students have the advantage of working with more mature people, and the community has the advantage of a stable organization like the junior college fostering a community drama enterprise.

Visual education. Since many junior colleges are ministering to a group of young people who formerly had little opportunity for education beyond the secondary schools, some junior colleges have developed interesting new methods of visual education. Wright Junior College, Chicago, has done a particularly good job in providing visual educational materials for the core curriculum courses they give in science. In one large lecture room I visited, where demonstrations were given, all the demonstration material was greatly enlarged to enable students to see more clearly experiments which were performed for their benefit. Models, drawings, and other material had been provided by the WPA and the NYA. Even the chalk was about four times normal size.

For the biological and physical science courses, Wright Junior College sets up demonstration laboratories where the students can go and experiment voluntarily with the materials being presented that week in the classroom. These demonstration laboratories are in charge of an assistant who aids students who wish to perform simple experiments. I found that students had a great deal of interest in these self-education laboratories. Many of them probably could understand the material of the lecture better by performing simple experiments in a demonstration laboratory than they could by reading descriptions in a textbook. Certainly one of the problems in many junior colleges is to provide a fairly sizable proportion of their students with more nonbook methods of learning.

Placement. The placement of terminal students varied enormously with institutions. In some junior colleges, no attempt at all was made to place graduates of terminal courses. In others, a very elaborate placement system had been worked out. In the Chicago junior colleges, all students register with the state and Federal employment offices. These offices send a duplicate card to the Bureau of Occupational Research which is part of the public school system. In this way, students not only have the advantage of the facilities of the public employment agencies, but also have the advantage of concerted effort on the part of the school system to place them. In Chicago, a coordinator is maintained in each of the junior colleges to facilitate the registration of students.

At Pasadena Junior College, California, the placement offices of the college are coordinated with the state and Federal employment offices and are located in the same building. There are some advantages to this type of coordination. There are probably more advantages, however, in having a coordinator at the junior college who works closely with the public employment agencies.

Community committees. Glenn L. Lembke, curriculum coordinator at Pasadena Junior College, said that community advisory committees for terminal courses were of great assistance not only in planning the curriculum, but also in placement. As a result of a study of placement possibilities, Pasadena plans to expand its offerings in cosmetology for girls and in pattern-making for boys. A new course is also being added for boys in building construction. Two new interesting curricula are being planned in industrial chemistry with a training in synthetics and plastics. Another new course is being designed for gasoline service station attendants.

In many of the California junior colleges, I found that a large number of four-year college graduates were coming back to the junior colleges after they had received their degrees to take occupational courses. In both Los Angeles City College and Pasadena Junior College were heavy registrations of liberal arts college graduates. The placement office at Pasadena informed me that it was almost impossible to place the students from Pasadena who went on and received a bachelor's degree in liberal arts unless they came back to the junior college to take some semiprofessional work.

Continuation training. There is a big field for municipal junior colleges in continuation training for graduates who wish to progress and for employed people in general who may be in a field of decreasing opportunity and who, therefore, wish to learn a new occupation. At Pasadena Junior College, D. W. Reidy is in charge of what is called the "Extended Day Program." The "Extended Day Program" consists of a great variety of courses offered after three o'clock in the afternoon and it includes the forum and lecture bureau programs. Most of the work offered in the continuation program is occupational in nature. There are a great many possibilities for offering this kind of program throughout the country.

In St. Louis, I visited the Grover Cleveland High School, which has an enrollment of about 700 in evening classes. Most of the registration in these evening classes is made up of high school graduates. While the work is not listed as on the junior college level, it is as much junior college work as that offered in many institutions. The equipment already possessed by a good many high schools might be utilized just as well for a longer period of the day. In fact, a great many cities could offer quite good junior college work at almost no expense to themselves. The high school facilities could be used for an extended day program.

Diversified occupations. An unusual development at Meridian Junior College, Mississippi, consists of a program to continue students through the junior college who have taken the "diversified occupations" course in the high school. Students in the "diversified occupations" group are under the direction of W. L. Newton. Meridian is a city with a population of about 40,000 and the junior college, therefore, cannot offer a very wide diversity of occupational courses. However, students in the "diversified occupations" group work for at least 20 hours a week in some occupations furnished by a Meridian industry. They also take about a half-time program at the college in subjects related as closely as possible to the occupations they are learning. For example, a girl who is interested in becoming a dental assistant may work in a dentist's office for 20 hours a week and get all the instruction that the dentist is able to give her about the practical aspects of the job. At the junior college she may take a course in speech to help her as a receptionist, a course in chemistry to help with her technical work, a course in accounting to help her to keep records, and a course in typing and shorthand to give her secretarial knowledge. Since Meridian probably could not assimilate more than two or three dental assistants a year, this plan seems very sensible. The biggest problem with a "diversified occupation" group is to work out class schedules. Each schedule presents an individual problem, but Mr. Newton says he has been able to work this out fairly well.

In-service training. Many junior colleges have a program for the in-service training of their faculties. One of the best programs I saw was at Rochester Athenaeum. The work there is very carefully organized so that each individual instructor knows precisely what the objectives are for each course given. The faculty spends a great deal of time in curriculum study and is aided in this process by outside consultants. The Institute also maintains on its staff a chairman of educational research. This chairman, L. L. Jarvie, devotes his entire time to the program of in-service training and to faculty study of the curriculum. While most junior colleges would probably not be large enough to have someone devoting his entire time to educational research, there are many which would benefit by assigning some specially gifted faculty member to it for at least part-time.

Coordination within the school system. A close coordination of secondary school, vocational school, and junior college was found in the Phoenix Junior College, Arizona. Superintendent E. W. Montgomery has done an excellent job at Phoenix in integrating all the educational work of the city. Included in the group of institutions at which students may take work are the Arizona Vocational School, the Phoenix Junior College, the high school, and the vocational department of the high school. Since Smith-Hughes funds are not available for vocational instruction in the junior college, the junior college students take their vocational instruction in the Arizona Trade School.

Core curricula. In some cities, like Chicago for example, students may come from vocational courses in the high school to the public junior colleges where they are given a core curriculum in general education. The core curriculum at Chicago consists of the following program:

FIRST YEAR

First Semester	*Semester Hours' Credit*	*Second Semester*	*Semester Hours' Credit*
English 101	3	English 102	3
Social science 101	3	Social science 102	3
Physical science 101 or biological science 101	3	Physical science 102 or biological science 102	3
Electives	6	Electives	6
Physical education	1	Physical education	1
	16		16

SECOND YEAR

First Semester		*Second Semester*	
Humanities 201	3	Humanities 202	3
Physical science 101, or biological science 101	3	Physical science 102 or biological science 102	3
Electives	9	Electives	9
	15		15

It hardly seems sensible to superimpose a course in general education on a vocational high school course, yet frequently this is done. Where possible, the work in general education should be moved down into the late high school years, and the vocational work should be moved up into the junior college years. This would permit giving the vocational work nearer the time when the student is actually going to use it.

Negro colleges. During my visits, I saw two Negro junior colleges, in addition to a public junior college in Chicago which had a large registration of Negroes. My observations about Negro education are, therefore, based on scanty evidence. The Negro education I did see, however, seemed to me to be quite unrealistic. The Negro high school in Chicago is among the few high schools in the country still giving a strictly preparatory course of the old type.

At Wilson Junior College, Chicago, probably only about half the students who enter graduate, and of the graduates only 25 per cent go on for a degree. Dean Bartky told me, however, that it was very difficult for him to convince students that they would be better off in a two-year program. The poorest students were the ones most impressed with the desirability of a degree. The Negro students, as a group, wanted to have as orthodox an education as possible. Nearly all of them wanted to enter the professions and did not want to take any courses to fit them for the jobs they probably would have inevitably.

At Bethune-Cookman College (Negro), Florida, I was told that the most serious problem was to get students to take courses which might be occupationally useful to them. Such courses, said the dean, Negro students do not regard as "educational." Both the president and dean of Bethune-Cookman College constantly preach the value of terminal courses but have a difficult time convincing students that such courses would be "respectable" for them to take.

Agriculture. Many junior colleges might consider profitably the possibilities in agriculture for terminal students. At Bakersfield Junior College, California, the work in agriculture is carried on at the farm run by the vocational agricultural department of the high school. Most of the boys taking the course are using the work directly in application to their farm-home problems.

At Chaffey Junior College, California, the college has recently performed a considerable service for its area by developing a peach tree which will foliate and bear fruit after a warm winter. For some reason the normal peach tree will not foliate in the spring unless it has been frozen dormant in the winter. Since many of the winters in Ontario are too warm to freeze the trees, successful peach crops have been possible only about once in three years.

The college went to work on this problem by importing peach trees from all over the world and by performing a number of experiments in grafting. When I visited there, the students were busy working on this project on a 60-acre laboratory. They have developed what is known as the "Weldon Peach" (named for an instructor, George P. Weldon), which will foliate and bear peaches even after a warm winter.

I was greatly impressed by the reality of this project which doubtless will help to rehabilitate the peach industry around Ontario. The instructor in agriculture told me he almost had to stand by some of the trees with a shotgun to keep students from taking the wrappings from grafts before it was time, because they were so anxious to see if the graft had been successful.

Another very interesting program in California was found at the California Polytechnic School in San Luis Obispo. The California Polytechnic School offers terminal work of either two- or three-year duration. Practically all courses are on a project basis and students work all over the 1400-acre farm and campus. President Julian A. McPhee said the main problem of the institution was that students felt handicapped without degrees. Since my visit, I understand, the institution has been given degree-granting powers.

The terminal courses offered in agriculture are interesting as an example of the great variety of possibilities in this field. A list of the courses offered follows:

Agricultural Inspection

State inspection service:

1. Border quarantine service
2. State standardization service
3. Grain inspection
4. Shipping point inspection

County inspector and commissioner:

5. Weed and rodent control, seed inspection
6. Apiary inspection
7. Standardization service
8. Field and orchard inspection

Agricultural Mechanics

1. Tractor operator
2. Farm foreman
3. Farm machinery business assistant
4. Farm maintenance

Crops

1. Truck crop production

Deciduous Fruits

1. Orchard manager
2. Nursery manager and propagator

Dairy Manufacturing

1. Buttermaking
2. Cheesemaking
3. Ice cream making
4. Marketing milk
5. Creamery management

Dairy Production

1. Cow tester
2. Dairy herdsman
3. Farm manager
4. Dairy farming
5. Dairy inspector

Landscape Gardening

1. Nursery manager
2. Landscape gardener

Meat Animals

1. Beef cattle herdsman
2. Beef feeding, commercial production
3. General livestock farm management
4. Commercial livestock production (beef or sheep)
5. Range or farm manager
6. Shepherd—flock master
7. Shipping association manager or stockyard assistant
8. Sheep feeding, commercial production
9. Swine feeding, commercial production

Poultry

1. Brooding of chicks
2. Growing of young stock

3. Hatchery management
4. Laying flock management
5. Marketing poultry products
6. Poultry breeding
7. Poultry plant management
8. Turkey production

Homemaking. Some of the best work in homemaking is offered in the New England junior colleges, most of which offer programs exclusively for young women. Programs offered by these institutions are not very much influenced by the requirements of the first two years of the standard home economics course, and, therefore, are quite good for the purpose they are designed to serve. An interesting program is offered by the Garland School in Boston. Following is a list of the offerings of Garland in this work:

JUNIOR YEAR

First Semester	*Hours*	*Second Semester*	*Hours*
Hygiene	2	Psychology	2
Household science	4	Household science	4
Household technology	2	Household technology	2
Income management	2	Child guidance and observation	2
Appreciation of design	2	Appreciation of design	2
Modern novel	1	Modern novel	1
Oral English	1	Current events	1
Chorus and music appreciation	1	Chorus and music appreciation	1
Cookery	4	Cookery	4
Clothing	4	Clothing	4
Special literature	3	Special literature	3
Dramatic art (elective)	1	Dramatic art (elective)	1
Typing (elective)	1	Typing (elective)	1
French conversation (elective)	1	French conversation (elective)	1

SENIOR YEAR

First Semester	*Hours*	*Second Semester*	*Hours*
Family relationships	1	Family relationships	1
Public questions and parliamentary procedure	1	Public questions and parliamentary procedure	1
Interior decoration	2	Interior decoration	2
Cookery or clothing	4	Cookery or clothing	2
Quantity cookery	2	Quantity cookery	2
Nutrition	2	Nutrition	1
Marketing	2	Meal planning, table service or advanced cookery	2
Income management	1	Costume design	2
(family finance)	1	Textiles	2
Modern drama	2	Home nursing	2
Textiles	2	House planning	2
Child guidance and observation	4	Problems in home decoration	1
French conversation (elective)	1	French conversation (elective)	1
		Senior field work	

The work at Garland, I found, was exceedingly practical and was designed solely to train the students to be good homemakers in the kind of homes they probably would run later. Curiously enough, the work offered to daughters of the quite wealthy and to daughters of the quite poor seems to be pretty good from the homemaking point of view. At Garland, the tuition is $1,800 a year without extras, yet Garland offers a more practical program for its girls than schools catering to a less well-to-do group.

Many of the public junior colleges also offer good work in homemaking and are relatively uninfluenced by the requirements of a four-year home economics course. The poorest courses in homemaking seem to be offered in institutions catering to what I would think of as the socially middle class. In these institutions, the young women get only courses designed to train them as teachers of home economics not as homemakers.

Art courses. At Lasell Junior College, Massachusetts, there was excellent work going on in the art department under the direction of Mrs. Parker. When I was there the students were making mannequins for a display of dresses of original design to be shown in a department store window in Boston. One very attractive young woman with whom I talked had given up all dates for the three previous weeks in order to get her dress finished. She had even hammered out the belt buckle for the dress in the craft department of the college. I wondered how we could get similar motivation in academic courses.

Merchandising. Also at Lasell, I saw some interesting work in merchandising. The girls in this course work in the Boston stores for three weeks before Christmas and for the Saturdays after Christmas. There is a close tie-up between Lasell and Filene's store, enabling the girls to get a variety of store experiences. Placement from merchandising courses seems to be pretty good as there is a large turnover in this field and a more or less constant demand for people with some training.

House-building and furnishing. Another interesting course given at several of the junior colleges around Boston is in house-building and house-furnishing. The course is given by Mrs. Eleanor Manning O'Connor, a registered architect. The students take the course for one two-hour session once a week. Mrs. O'Connor has them clip from magazines ideas about house-furnishing or building which appeal to them, and by the end of the year they are supposed to have a complete plan of their ideal house and how it will be furnished. This course gives the students a considerable amount of experience in sketching and in consumer education. It also develops in them the ability to evaluate architecture and furnishings.

Clinics. In various parts of the country junior colleges are replacing old classroom procedures by the establishment of clinics in reading, personal appearance, testing, and vocational information. Most of these clinics seem to work quite well. An interesting clinic in writing techniques has been developed at the University of Houston, Texas. Instead of the normal class in English composition, students attend a writing clinic, four at a time for one hour, at which their papers are read and discussed. The composition instructor acts as a consultant for the student on writing problems for all courses, but does no classroom teaching. From the instructor's point of view the system works well because he has no burdensome pile of themes to read at night, though he does put in a longer day than a classroom instructor. From the student's point of view the results are good because his problems have been dealt with individually. From the college point of view the program is a success because there is an improvement in all papers in all departments.

Grade reports. Also interesting is a program the University of Houston has developed in indicating student academic progress. Instead of sending out the usual grades to students and parents, a paragraph describing the students' good points and weak points is issued. Each instructor writes a sentence or more about each student in his class and turns the report in to the central office. The office compiles this material into a descriptive paragraph to send out at report periods. Such reports are much more useful to students than grades. Further, the instructor must think of his students individually and thus individualize his instruction when his marking has to be of this type. The work of student advisers is also simplified greatly when reports from instructors are quite specific as to student strengths and weaknesses.

Citizenship. At nearly every institution I visited, those in authority were concerned about training students for citizenship. Interesting courses in the social studies are given at many junior colleges providing students with opportunities to visit relief agencies, jails, courthouses, and government offices. Such visits are exceedingly effective if the student is prepared beforehand to look for essential things, and if there is an opportunity provided after the visits to see if attitudes have changed or improved.

One of the most effective ways, of course, to train students for citizenship is to give them responsibility for their own student government. The California junior colleges nearly all have student governing bodies which are quite effective. Of the boarding institutions I visited, Colby Junior College, New Hampshire, has one of the best systems of student self-regulation. The Colby system provides for a student government association to make regulations and a student court to enforce such regulations. The only objection to the system I heard came from the president of the college who said the students were too severe with each other.

The secret of the success of the Colby student government organization lies in the behind-the-scene direction given by the officers of the college. The dean of women, Miss Amelia Clark, has the happy faculty of being able to guide the young women in the direction they should go by innumerable private conferences with student leaders, who, in turn, influence the other students. Thus the college seems to be almost entirely student governed and students get a valuable experience in the responsibility of citizenship.

The foregoing illustrations indicate in a meager way some of the kinds of interesting work now being offered by junior colleges all over the country. Many other illustrations might be used and many other institutions cited. I think, however, the illustrations given do show that the junior college is striking out in new directions to meet the needs of changing times and a new kind of student body.

Chapter XV

MAJOR PROBLEMS OF TERMINAL EDUCATION FOR FURTHER STUDY

AT AN EARLY MEETING of the Commission on Junior College Terminal Education, one of its members, who is generally recognized as an outstanding educational leader, said that in his judgment the proposed exploratory year of study would accomplish its chief purpose satisfactorily if it succeeded in isolating and defining the principal problems in the field. As the year's work is reviewed, it is felt that much more than this has been accomplished.

All that has been done, however, may be thought of in the larger sense as contributing to the more intelligent study and hopeful efforts at solution of the outstanding problems of terminal education. Compilation of practically all the widely scattered literature of the field and publication of extensive abstracts of it in the volume, *The Literature of Junior College Terminal Education,* should furnish a rich reservoir of information for many years to come. The present volume, although inadequate in some respects and lacking the completeness that had been hoped for, furnishes a much more extensive and varied picture of the present status of terminal education in the junior college than has been available before.

With these two publications reporting where we have come from and where we are now in the field of junior college terminal education, we are prepared to go forward more intelligently with studies of some of the numerous unsolved problems in the field. For this purpose it is desirable to present various statements of outstanding problems and their relative importance.

In addition to the two publications just mentioned, the exploratory year of study has other accomplishments to its credit. A third volume in the trilogy of terminal education monographs planned as major phases of the year's work, *Why Junior College Terminal Education?* will appear shortly after the present volume. A carefully planned and comprehensive campaign of interpretation of the junior college movement, with particular reference to the increasing significance of terminal education, resulted in the publication of many articles in the educational and lay press and of a large amount of news matter in the newspapers of the country. A series of 24 state and regional conferences brought together almost 4,000 junior college administrators, faculty members, and university, college, state department, and other educational leaders for frank consideration of the problems of junior college terminal education. Location of these conferences is shown on the map of Figure 25. Numerous addresses have been given, information furnished, reprints of important articles distributed. Sixty sets of lantern slides illustrating in graphic form significant data, with accompanying lecture notes, have been ordered by junior colleges in 24 states, to be used in presenting the subject locally to educational and lay groups.

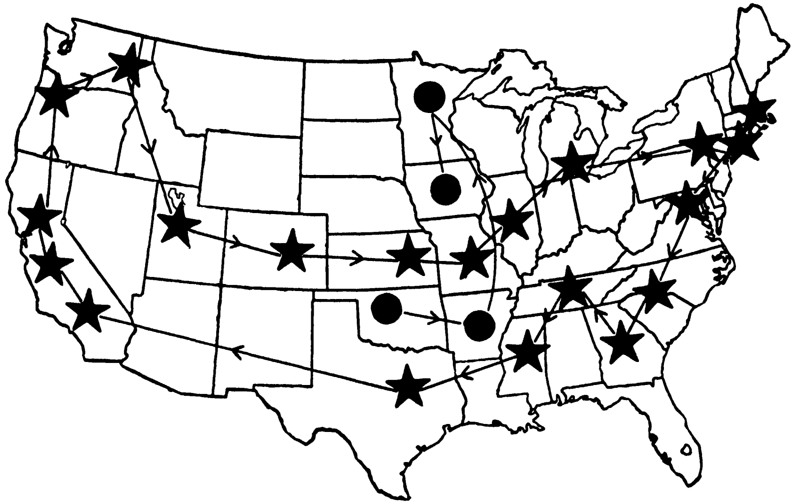


Figure 25. Location of Regional Conferences on Terminal Education, 1940

All of these varied activities have served to acquaint the educational as well as the lay public with the increasing importance of the junior college movement and particularly of the part terminal education must play in it. They are a substantial foundation upon which to project studies for several years ahead in the investigation, if not the complete solution, of many of the vital problems of terminal education. This final chapter of the present volume, therefore, very properly may include a variety of statements of the unsolved problems as recognized and formulated by different groups.

In the 10 following sections of this chapter will be found information on problems of terminal education as indicated below:

1. Problems as voted on by junior college administrators and others
2. Problems and studies in which junior colleges have expressed a desire to participate
3. Problems selected for special experimental work in eight junior colleges by the General Education Board
4. Problems for possible inclusion in supplementary studies conducted by the American Association of Junior Colleges
5. Problems stated in *American Junior Colleges*[1]
6. Questions submitted to more than 3,000 educators and laymen on problems of terminal education
7. Student judgment on important problems
8. References to other published lists of junior college problems
9. Problems in business terminal education as formulated by a special cooperating committee appointed by the Department of Business Education of the National Education Association, Hamden L. Forkner, *chairman*
10. Problems in home economics terminal education as formulated by a special cooperating committee appointed by the American Home Economics Association, Miss Ivol Spafford, *chairman*

With reference to the last two features, it should be stated that similar plans were developed for special cooperating committees in other areas such as agriculture, engineering and technology, public service, and personnel procedures but, because of later modification of plans, organization of these committees was not completed so that no reports have been received from them.

1. Problems as Voted on by Junior College Administrators and Others

Page four of the *Information Blank* (see appendix, page 258) contained a list of 38 suggested "outstanding problems" concerning the relative importance of which junior college administrators were asked to express their judgments. This page was used also as a basis of discussion of significant problems at most of the 24 regional conferences already mentioned. Instructions for marking this blank were as follows:

A—To indicate the *one* most serious problem of the entire group
B—To indicate very important problems
C—To indicate problems of some significance
—Leave blank, if of no significance

---

[1] Edited by W. C. Eells and published by the American Council on Education, Washington, D.C., 1940.

These instructions were not always followed. Frequently individuals marked one problem in each of the eight groups with an "A" instead of one for the entire set. Occasionally as many as 20 "A's" were found on a single blank. This is not a vital matter since the chief object of the list was to stimulate thought concerning these problems and to secure some judgment as to their *relative* importance.

Table XXVI shows, for each question, for the total of 653 votes cast, the number of A, B, and C judgments and a single composite score, designated "percentage of maximum score" derived by assigning a weight of 3 for each "A," 2 for each "B," 1 for each "C," and 0 for each blank. For the first question the total number of different judgments was: A, 211; B, 261; C, 38; blank, 143; total, 653. The weighted score and its reduction to a comparable "percentage of maximum score" are computed as follows:

A 211×3=633
B 261×2=522
C 38×1= 38   Maximum possible score ....653×3=1,959
143×0= 0   Percentage of maximum score: 1,193/1,959=61%
Total 653 1,193

This percentage figure is understood easily and is comparable for different component groups as well as for the total, regardless of the number of individuals involved. It is reported separately, therefore, for three subgroups, public junior colleges answering by mail, private junior colleges answering by mail, and conference groups. Since many of the problems were judged quite differently by the public and private junior college representatives, a comparison of these two columns is significant. No such segregation was feasible for the various groups and individuals represented at the regional conferences which, therefore, are summarized together in the last column.

An examination of Table XXVI shows that six problems (1, 6, 7, 20, 21, and 27) received a composite score of 50 per cent or more of the maximum possible score and eight others a score of 40 per cent or more. The first problem, rather general in nature, "how to develop terminal curricula which will fit better the needs of the community and its students" not only received the highest composite score but was ranked also as "A" by much the largest number of educators. On the other hand, every suggested problem received at

Table XXVI. Judgments of 653 Educators Concerning Importance of Suggested Problems of Junior College Terminal Education

Problem	Number			Percentage of maximum score			
	A	B	C	Total	Public	Private	Conferences
Organization							
1. How to develop terminal curricula which will better fit the needs of the community and its students	211	261	38	61	66	43	64
2. Determining what occupations should be classified as semiprofessional	16	106	175	22	18	11	26
3. How to make a community survey and to use its results effectively	40	226	121	35	31	19	41
4. How best to utilize community leaders in the formulation of semiprofessional curricula	11	162	171	27	27	17	29
5. On what basis should the private junior college with a regional or national rather than local clientele determine what terminal curricula it should offer	50	101	94	23	8	42	22
6. How can a small junior college support a suitable range of terminal curricula	172	222	90	54	51	50	55
Content							
7. Determining what courses, if any, should be required of all terminal students	103	289	112	51	46	43	54
8. Deciding whether courses of a "trade" character or level should be given in junior college	25	163	141	28	28	16	31
9. How should junior college vocational courses differ from those in high school; e.g., in business or home economics	19	171	169	29	26	19	32
10. Should vocational training be primarily of a broad, general nature, or should it be specific preparing students for immediate employment with little or no apprenticeship	88	221	113	42	44	28	45
11. How much general or cultural education should there be in a semiprofessional curriculum	50	263	135	41	44	39	41
12. How to determine the nature and content of a general core curriculum for "social intelligence"	40	194	137	33	33	31	32
13. Modifying content of academic curricula (English, social studies, etc.) to meet needs of terminal students	60	254	125	42	44	36	41
14. Should survey courses in social, science, and vocational fields be offered	12	143	193	26	29	23	26
Method							
15. How to adapt instruction to the abilities and interests of terminal students	117	254	80	48	51	39	50
16. How to integrate high school and college curricula	53	203	126	35	40	21	38
17. Deciding whether to arrange with industries for programs of part-time cooperative training	40	167	126	30	28	13	34
18. How can suitable textbooks and other teaching aids be obtained	16	127	159	24	25	11	26
19. How to combine practical experiences with classroom teaching	64	222	136	39	39	36	40
Guidance							
20. How to determine who should take terminal courses	129	276	65	51	51	45	53
21. How to discover student abilities, interests, aptitudes, and needs	115	280	84	50	50	49	51
22. How to interest students in terminal courses	52	211	126	36	42	25	38
23. How to convince parents and the community of the value of terminal education	59	215	121	37	44	33	36
24. How to overcome schoolboard indifference to terminal education	13	100	111	18	18	6	21
25. How to integrate high school and junior college guidance programs to secure most suitable enrollment in terminal curricula	54	220	95	36	41	16	39
26. How to organize and develop placement and follow-up service for students in terminal courses	48	255	142	41	45	33	41

Table XXVI.—*Continued.*

Problem	Number			Percentage of maximum score			
	A	B	C	Total	Public	Pri-vate	Confer-ences
Staff							
27. What training, experience, and personal qualifications should characterize instructors of terminal courses	139	232	89	50	49	37	53
28. Should certification or accreditation requirements be modified for instructors in terminal courses who are well prepared from the vocational standpoint	66	177	124	35	30	26	38
Equipment							
29. What specific materials and services should the library offer for semiprofessional courses.	59	198	143	37	33	32	39
30. What specific materials and services can the library render to serve general cultural aims	27	142	153	26	24	24	28
31. What housing facilities are needed for specific terminal curricula.	55	151	137	31	37	20	32
32. What special technical equipment is needed for specific terminal curricula	82	191	126	38	42	28	40
Financial Support							
33. How to secure Federal aid for vocational courses	97	188	72	38	46	16	41
34. How to secure more adequate state financial aid for terminal programs.	124	174	52	39	46	11	45
35. Should special fees be charged to help meet expenses for semiprofessional courses	47	138	161	30	26	23	32
General							
36. How to establish better relations with higher educational institutions	87	224	113	42	36	33	46
37. How to determine suitable criteria for evaluation of terminal courses given	122	234	83	47	51	39	48
38. Should accreditation agencies take cognizance of terminal curricula	67	255	119	42	42	35	52

least 11 "A" votes and was considered highly important, therefore, by at least part of the judges.

In general the public junior college representatives tend to rank the suggested problems somewhat higher than do the representatives of the private junior colleges. In the case of nine problems the public junior college rating is two or three times as high (numbers 8, 16, 17, 18, 24, 25, 31, 33, 34). The most marked exception is No. 5, which refers especially to the problem of the private junior college, and therefore is rated five times as high by the private junior college representatives.

The problem rated the highest by two of the groups is the first one—which has two-thirds of the maximum possible score in the judgment of the public junior colleges, but less than half of the maximum possible score in the judgment of the private junior colleges.

The most important problem in each of the eight sets of problems as rated by all groups combined and by public, private, and conference groups shows a marked similarity of judgment. These problems are as follows:

Problems	*Total*	*Public*	*Private*	*Conference*
Organization	1	1	6	1
Content	7	7	7	7
Method	15	15	15	15
Guidance	20	20	21	20
Staff	27	27	27	27
Equipment	32	32	29	32
Financial support	34	33, 34	35	34
General	37	37	37	38

It is a temptation to write a paragraph or more, elaborating upon each of these 38 problems, and suggesting methods of attack, but space will not permit. Some are relatively difficult to solve; others can be handled with little difficulty. Methods for some are fairly obvious—for others intricate or obscure. Some doubtless can be attempted by one method, some by another method, some by a combination of methods. Library study, office analysis, questionnaire data, committee judgment, summary of practice, institutional experimentation, and summer workshop study are varied methods of attack that may be appropriate in different cases. Several are provided for, in whole or in part, in the eight institutional studies for which special grants have been made by the General Education Board. (See pp. 188-90.)

In addition to the 38 problems listed in Table XXVI, correspondents were asked also to write in other problems not covered in this list. A selection of the more important ones is given below:

From Public Junior Colleges

How much control should Federal authority exert over state institutions that are subsidized through the George-Deen Act

How to use Federal money without too much Federal and state interference and control

Our outstanding problem has always been to get students enrolled in terminal courses. Since a large per cent of our people look to senior college it is not the thing to enroll in terminal courses

Should secretarial and accounting courses be offered just because there is a demand for them when we know too many people are preparing for these fields

How to develop terminal programs without extra cost and utilizing present faculty

What type of state legislation will best encourage junior college development, especially in the terminal field

Should graduation be an objective in terminal education

To what extent may student labor, paid either by the college or by the

National Youth Administration, be used as an educational process in a terminal education program

How to train teachers and guidance leaders for terminal curricula

Should the high school attempt to prepare for any vocations or should the high school limit itself to general education and leave the junior college to do the special training

What is the practice of colleges and universities in accepting transfer credits for students in terminal curricula

From Private Junior Colleges

We are wondering whether in an agricultural community like ours it would not be possible to offer terminal courses in cooperation with the state agricultural college, where they could approve the course and offer assistance through their extension service. It seems to me this is a field to be investigated.

Fitting terminal courses to the "pattern" of education which seems to be an integral part of the institution. We wish to remain a high-grade junior college, attracting junior college students. We do not wish to become a trade school either in curriculum or clientele.

Referring students to terminal opportunities in other schools after they have completed so-called "general education" in our junior college. We consider this a very important function and one not yet adequately developed. All colleges cannot offer all terminal education. Our problem is to assist the student in planning and achieving a worth-while education for himself. We feel just as responsible in referring "terminal students" to their best opportunities as in referring engineers, premedics, precommerce, and other university preparatory students to appropriate places in which they may complete their training.

We are now a liberal arts junior college. The problem is, what terminal courses to offer, and how to offer them without getting a new faculty.

What is the dividing line between semiprofessional and preprofessional? Entrance requirements in both our state institutions of higher education are sufficiently liberal, so that semiprofessional courses in journalism, drama, art, home economics, secretarial training, etc., have a tendency to turn into about the same channels as the lower division work in these same professional schools at the university and state college.

Deciding upon terminal courses which represent a field in which there is a relatively constant demand

How to keep good students from choosing terminal in preference to academic courses

How to keep students in school until full terminal training has been given

How to make the adjustments necessary in the case of a student graduating in a terminal course who has done such satisfactory work that he desires to continue on a four-year degree course

From Conference Groups

What is the dividing line between semiprofessional and preprofessional? Entrance requirements in both state institutions are sufficiently liberal so that semiprofessional courses in journalism, drama, art, home economics, secretarial training, etc., have a tendency to turn into about the same channels as the lower division work in these same professional schools at the university.

How to keep students in college until they complete their semiprofessional training

Whether in an agricultural community like ours it would not be possible to offer terminal courses in cooperation with the state agricultural college where they could approve the courses and give assistance through their extension service

How to keep students from choosing terminal courses in preference to academic courses

How to use Federal money without too much Federal and state interference and control

How to give academic-minded students a realization of the vocational work of the world and its importance and some training in actual labor and the use of their hands

2. Problems and Studies in Which Junior Colleges Have Expressed a Desire to Participate

During the spring of 1940 the Commission on Junior College Terminal Education prepared and circulated to the junior colleges of the country a "Preliminary Information Blank" asking them to indicate by one of three possible answers their probable interest in participating in one or more of 11 suggested types of cooperative studies. Replies were received from 343 junior colleges of which 43 said they were not interested in the proposed study. Replies of the remaining 300 are summarized in Table XXVII. Although some phases of the Commission's original proposals have had to be modified, plans are being formulated to carry out, during the next few years, a considerable number of these studies along the lines suggested.

3. Problems Selected for Special Experimental Work in Eight Junior Colleges by the General Education Board

In the fall of 1940 the General Education Board selected eight significant problems related to terminal education. In December the Board made grants totaling $57,800 to eight institutions to carry on special experimental studies in these eight fields for periods of two or three years, under the general supervision of the Administrative Committee of the Commission on Terminal Education. The names of these institutions and the specific purposes for which the grants were made are as follows:

Table XXVII. DESIRE OF 300 JUNIOR COLLEGES TO PARTICIPATE IN VARIOUS SUGGESTED COOPERATIVE STUDIES

Suggested type of participation	Will surely partici-pate	Will probably partici-pate	Will probably not partici-pate or blank
1. Make a follow-up study of graduates, probably of classes of 1936, 1938, and 1940, who did not continue their formal education after graduation from your junior college, using blanks furnished by Washington office (unless otherwise done recently). Summaries to be made at Washington office	201	72	27
2. Make a study of the judgments of parents of the same students, using blanks furnished by Washington office	171	90	39
3. Make a study of judgments of employers of the same students, using blanks furnished by Washington office	177	84	39
4. Make study similar to that outlined in No. 1, 2, 3 of representative group of students dropping out of junior college before graduation	171	90	39
5. Make a study of opinions and judgments of students now enrolled in terminal courses, or who may be enrolled in them when study is made, using blanks furnished by Washington office	216	63	21
6. Make a study of opinions and judgments of students not enrolled in terminal courses	213	63	24
7. Make an intensive survey of the needs and potentialities of the junior college's own institutional community according to a general pattern outlined by the Commission (unless otherwise done recently)	156	87	57
8. Consider the desirability of developing a series of community advisory committees for each of the major fields of curricular significance in the community	129	102	69
9. Send one or more representatives to one of perhaps a half dozen intensive summer laboratory groups or workshops in summers of 1941 or 1942 or both	51	159	90
10. Carry on special demonstration or experimental work in a particular field, with large degree of local independence, but with suggestions from Washington office and report of results to that office	96	117	87
11. Report each year for five years on the general success of new terminal courses that may be added to your curricula	195	75	30

Bakersfield Junior College, Bakersfield, California. Study of guidance procedures with oncoming student population.

Los Angeles City College, Los Angeles, California. Study of aptitude tests for admission to semiprofessional curricula.

Pasadena Junior College, Pasadena, California. Study of placement, follow-up, and continuation training.

Rochester Athenaeum and Mechanics Institute, Rochester, New York. Study of use of cooperative work programs.

San Francisco Junior College, San Francisco, California. Inquiry into ways of making community surveys to determine the kinds of terminal courses best adapted to individual communities.

Scranton-Keystone Junior College, La Plume, Pennsylvania. Study of the utilization of community committees.

Weber College, Ogden, Utah. Study of selection and organization of terminal courses especially suited to needs of the Ogden area.

Wright Junior College, Chicago, Illinois. Study of ways of evaluating the results of terminal courses.

4. Problems for Possible Inclusion in Supplementary Studies Conducted by the American Association of Junior Colleges

At the time this volume went to press, 135 junior colleges had agreed to contribute $25 each for periods of one, two, or three years to make it possible to carry on special supplementary studies under the auspices of the American Association of Junior Colleges. The tentative outline of activities and studies under this plan was stated as follows:

A. BETWEEN FEBRUARY 1, 1941 AND SEPTEMBER 1, 1941.

Institutional Study—An introductory study of the philosophy of education held by the faculty of each participating junior college; formulation of statement of the specific aims and purposes of the institution; national summary and interpretation (to be made basis of series of local faculty meetings)

Institutional Study—An analysis in each junior college of student sentiment and judgment regarding the institution's curriculum, staff, student activities, guidance service, occupational intentions of students, and other factors related to terminal education. To be secured on individual blanks, furnished by Washington office, summarized on forms to be furnished, and summaries sent to Washington office for national interpretation and publication

Central Office Study of present policies of higher educational institutions with reference to admission of students graduating from terminal curricula in junior colleges, and analysis of success of such transfers (preliminary information indicates several hundred such transfers now available for study)

Central Office Study of present practice and desirable policies with reference to granting appropriate title or degree (associate, or other) to mark satisfactory completion of terminal and other curricula

B. After September 1, 1941. (Order of studies in the three groups below, and details for institutional participation, to be determined later)

Institutional studies

1. Follow-up study of students dropping out of junior college before graduation
2. Follow-up study of students graduating from terminal curricula
3. Follow-up study of other students not continuing their formal education beyond the junior college
4. Study of judgments of employers of students graduating from junior college terminal curricula
5. Study of judgments of parents of selected groups of students
6. Study of preparation and qualifications of instructors for terminal curricula
7. Adaptation of results of experiments in eight selected institutions to local institutional use

Central office studies

1. Development of terminal curricula for small junior colleges
2. Determination of occupations that should be classed as semiprofessional
3. Special problems of privately controlled junior colleges
4. The place of "trade" education in the junior college
5. Appropriate distribution of cultural and vocational elements in different terminal curricula
6. How to interest students in terminal curricula
7. Library aids and methods for terminal education
8. Specialized equipment for terminal education
9. Problem of Federal aid for terminal curricula
10. Relation of accrediting agencies to terminal education
11. Relation of organized labor to terminal education

Possible monographs in following fields

1. Business education
2. Home economics education
3. Engineering and technology
4. Aviation education
5. Agricultural education
6. Medical-secretarial training
7. Recreational leadership
8. Police training
9. Speech education
10. English for terminal students

5. Problems Stated in American Junior Colleges

In the information blank circulated to secure data for publication in the reference volume, *American Junior Colleges,* each institution was asked to answer in 50 words or less the question: "What is the greatest problem facing your institution today?" Not all answered this question, but the replies of 381 who did so are published, often in condensed form, in that reference volume. An analysis of these replies shows that 95 of them related in some way to the problems of terminal education. Of these, 77 were from public institutions, 18 from private ones. The 95 statements come from approximately one-fifth of the 494 accredited junior colleges represented in the volume, or from almost one-fourth of those who stated any "greatest problem." It is rather significant that of the wide range of problems possible almost 100 singled out some phase of terminal education as their most important and pressing problem. It is doubtless true also that many general statements, such as the problem of the improvement of the curriculum, or adequate financing of the institution, or improvement of guidance procedures, have distinct terminal implications, although they were not so classified here. A summary of the statements of these problems with frequencies of mention is given below.

Provision of terminal courses; provision of suitable vocational and technical training; provision of adequate terminal education; expansion of vocational education; provision of additional vocational courses (28)

Adjustment of the curriculum to meet local community needs (7)

Adjustment of curriculum to meet student needs; needs of students of varying abilities and interests, of non-academic type of students; of lower 30%; of lower 65% (9)

Provision of adequate facilities for broad program of general education both terminal and academic; organizing curriculum to meet needs of terminal course for intelligent citizenship; meeting needs of terminal students with respect to both general education and vocational training and orientation (14)

To furnish adequate developmental experience for youth of community assuming 7% to 10% will be in professional life, 25% to 30% in semi-professional work, and 60% to 70% in routine occupations, but all needing character, cultural, and citizenship training to fit American ideals of family, community, and state (1)

Meeting needs of terminal students with limited number of terminal courses in small college (3)

Development of terminal courses in particular fields—agriculture, home economics, secretarial science, engineering (5)

Inadequate financial support for needed program of terminal courses; need of building; need of equipment (11)

Difficulty of securing suitable instructors, texts, and materials or terminal curricula; adaptation of instruction to terminal students (4)

Development of personnel and guidance program especially to meet needs of terminal students (3)

Education of constituency, public, and board of education to value of terminal courses (4)

Popularization of terminal courses with students (4)

Attitude of labor unions in control of industry making placement difficult (1)

Future of the institution, whether vocational or other (1)

6. Questions Submitted to More than 3,000 Educators and Laymen on Problems of Terminal Education

In the autumn of 1940 the Commission on Junior College Terminal Education submitted a list of 10 questions to 3,748 individuals, educators and laymen, asking their judgments on junior colleges and terminal education. These questions were as follows:

1. Do you think that in your state or region young people increasingly will be unable to secure full-time employment before they are 20 or 21 years of age?
2. Do you think that the courses of study open to freshmen and sophomores in the average university or liberal arts college adequately fit the needs of students who will spend only two years in college?
3. In your opinion is too large a proportion of youth of college age now enrolled in the standard universities and four-year liberal arts colleges of the country?
4. In your opinion is the number of junior colleges and the enrollment in them, in your state or region, likely to increase markedly in the next decade?
5. Which is the more important function of the junior college: (a) *The terminal function,* designed primarily to give young people who complete their formal education in the junior college preparation for an occupation and also preparation for personal and social citizenship; or (b) *the preparatory function,* designed primarily to duplicate the work of the first two years of the standard university and to prepare for advanced work in the university?
6. If junior colleges in your vicinity were equipped adequately to give a variety of semiprofessional curricula and terminal courses of a general character well adapted to community needs, about *what percentage* of high school graduates do you feel ought to enter such junior colleges?
7. Should additional publicly controlled junior colleges be established in your state so that they will be easily accessible to the great majority of high school graduates?
8. (a) Should publicly controlled junior colleges be supported entirely by public funds with no charge for tuition to students—as in public high schools today?

   (b) If not, what proportion of the cost should be met by student tuition?
9. Do you feel that the junior college is primarily an institution in competition or in cooperation with other institutions of higher education?

10. Please make a general statement (below, or on the back of this page) giving your general judgment of the significance of the junior college movement, particularly with reference to its terminal aspects. (Permission given to quote this statement, in whole or in part, if desired.)

Replies were received from 1,907 individuals, slightly more than half of those whose judgments were sought: 167 presidents of publicly controlled colleges and universities, 232 presidents of privately controlled colleges and universities, 182 presidents or deans of publicly controlled junior colleges, 161 presidents or deans of privately controlled junior colleges, 190 superintendents of city school systems, 60 university registrars and state department representatives, 103 editors of educational periodicals, 129 miscellaneous educational leaders, 14 presidents of national labor unions, and 669 business and professional men in localities where junior colleges are in existence. Their replies will be summarized and discussed in the third monograph of this series, *Why Junior College Terminal Education?*

7. Student Judgment on Important Problems

At the 24 regional conferences, already mentioned, selected groups of students were met and problems of terminal education discussed with them without the presence of administrators or faculty members. Several hundred students were present in these conferences. From many of them written statements were secured regarding various problems. Their replies will be summarized in a later monograph.

8. References to Other Published Lists of Junior College Problems

Several lists of junior college problems have been published at different times. These lists contain many problems related directly or indirectly to the field of terminal education. They should be consulted by those who wish to have available all such lists of suggested problems. The following may be noted:

W. W. Carpenter, "Problems in Junior College Education," *Junior College Journal* (October 1934), 5:13-15.

J. W. Harbeson, "Junior College Problems," *Junior College Journal* (November 1936), 7:97-98.

A. J. Cloud and H. W. Leuenberger, "Problems of Junior College Education," *Junior College Journal* (October 1938), 9:4-7.

W. C. Eells, "Needed Junior College Research," *Junior College Journal* (November 1938), 9:91-93.

D. H. Eikenberry, *Suggested Studies in Secondary Education: A List of Problems for Research,* Civic Education Service, Washington, D.C., 1939, 101 pages. pp. 35-36, 87-89.

A. A. Douglass and others, "California State Junior College Survey: A Series of Reports," *Junior College Journal* (May 1940), 10:591-601.

L. E. Engleman and W. C. Eells, *The Literature of Junior College Terminal Education,* American Association of Junior Colleges, Washington, D.C., 1941. Entries 460-72.

9. Problems in Business Terminal Education as Formulated by a Special Cooperating Committee[2]

The committee submits herewith a tentative report of the problems that have thus far presented themselves as of major importance in any further studies which are to be carried on in the field of business education on the junior college level.

Fundamental principles. The business education committee is in agreement with the fundamental principles of the American Association of Junior Colleges' Policy Committee as set forth in the January 1940 issue of the *Junior College Journal.* The committee wishes to suggest the following additional fundamental principles:

1. Inasmuch as the students who complete semiprofessional courses immediately enter the labor markets, the junior college has a direct obligation to become aware of its responsibilities to those students and to the business firms for which they will work.

2. The terminal function of the junior college is not clearly understood by the rank and file of teachers in our lower schools, nor by the parents, nor by the students, nor by the taxpayers who support the schools. Therefore, it should be the purpose of the American Association of Junior Colleges, through the various local, state, regional, and national committees, to develop ways and means of bringing about better understanding and thus a keener appreciation of the work which the junior college is able to do in the field of terminal education.

Definition of terminal business education on the junior college level. The committee submits the following definition of terminal business education on the junior college level: Junior college terminal business education embraces all those phases of economic and vocational education which have as their function (1) the preparation of workers in the field of business occupations, (2) the education of consumers of the products and services of business, and (3) the education of persons to manage intelligently their personal incomes and financial resources.

---

[2] Committee appointed by the Department of Business Education of the National Education Association to cooperate with the Commission on Junior College Terminal Education. Hamden L. Forkner, Teachers College, Columbia University, *chairman;* William H. Conley, Wright Junior College, Illinois; Joseph DeBrum, Sequoia Union High School, California; McKee Fisk, Woman's College of the University of North Carolina; H. D. Shepherd, North Texas State Teachers College; Edwin A. Swanson, Arizona State Teachers College.

Junior college terminal business education serves the following groups of people: (1) those beyond the compulsory school age, (2) those who have completed the high school requirements for a diploma or certificate, and (3) those whose educational programs are less than those required for the baccalaureate degree.

Twenty principles of junior college business education.[3] In the light of present practices and needs, the following principles of junior college business education appear to be justified.

1. Junior college business education has a responsibility for both vocational and general education. Basic business subjects dealing with economic literacy, consumer education, and business skills for personal use contribute to the social intelligence function of junior colleges. Vocational training for existing jobs constitutes an adequate program on this level. This includes not only the necessary skill and knowledge but also desirable business attitudes and habits, and a fund of reserve power which is necessary for the student to take advantage of promotional opportunities.
2. The vocational education program at the junior college level is correlated with the program of general education. Junior college leaders see no conflict between general or cultural education and vocational education. It is recognized that best vocational education contains an abundance of general education, that no cultural education is complete without some vocational education, and that one is the complement of the other.
3. A flexible program from the administrative standpoint is highly desirable. This means the organization of short unit courses of new materials of specialized skills or knowledges for which there is a need, or for review and skill maintenance purposes. Such short unit courses serve for in-service training, for rehabitation of previously acquired skills, for filling in the time between jobs.
4. The terminal vocational or semiprofessional business education program is based upon occupational surveys and job analyses of

---

[3] McKee Fisk, "The Junior College Business Curriculum," *Sixth Yearbook*, National Commercial Teachers Federation, 1940, Bowling Green, Kentucky, pp. 90-93.

positions which likely will be filled by junior college graduates within the community or in communities to which follow-up studies indicate junior college graduates migrate. In certain particular instances, owing to peculiar training facilities within a community, a junior college is justified in organizing its program on a regional basis. Such specialized programs as hotel and restaurant operation, foreign trade, and commission or brokerage businesses may be cited in this connection.

5. Semiprofessional business demands not only basic skill training but also knowledges and understandings which give added vocational value to the skills. It is recognized that wider use of business skills is dependent upon a broader base of occupational intelligence, of business relationships, and of greater adaptability.

6. Increased specialization characterizes the business education program at the junior college level more than at the high school level. Preparation for particular jobs as opposed to more general preparation is one way of providing this increased specialization. Thus the training of dictaphone operators, of hardware sales people, of machine bookkeepers, of ready-to-wear salespeople, of timekeepers instead of training just retail sales clerks and general office clerks is one method of providing such specialization.

7. Work experience, ordinarily of an apprenticeship nature, is essential to a fully developed vocational business program. This experience may be of the usual cooperative nature or may develop along some of the less usual types such as college-directed experiences, other institutional cooperation, planned and criticized observation, and personal or group investigation. Owing to the fact that the junior college is the last formal education for most students, hence closest to their productive work experiences, every effort to make the transition from training to earning as natural as possible is important.

8. A unifying course as the culmination of the present training experience is desirable. This may take the form of allowing credit for practical, coordinated experience as indicated above or in specially organized activities in which productive work is done, as in secretarial training in a centralized or individualized form, as in operation of a school bank, a student activity office, or a student cooperative store.

9. Junior college business education of a semiprofessional nature finds it necessary to work closely with the business interests of a

community through the use of advisory committees and through the participation of both faculty and students in the committee work of business men's organizations. Thus these community groups become a part of the total program.

10. Guidance of all types is essential in junior college business education. Guidance at the junior college level develops from guidance at the earlier secondary levels in providing more thorough analysis, wider experiences based upon more intensive observation, and greater maturity.

11. No vocational program is complete without an adequate placement service in connection with it. Ideally, placement is a whole school function. When such an arrangement is not possible, one of the teaching staff should be allowed sufficient time to take care of the placement. Indeed, if it is a question of curtailing the vocational program in order to allow teacher time for placement, such a procedure is probably more in keeping with sound vocational education than to omit placement service.

12. If evidence points to the need for a preprofessional business program, such a program should be offered. Close relationship between the preprofessional and semiprofessional business programs is necessary.

13. Laboratory practice in economic education is necessary at the junior college level. This type of activity involves field study through investigation, experimentation, interviewing, and supervised practice.

14. Community materials should be introduced widely into business education courses. This is necessary if the responsibility of the junior college to the local community is to be fulfilled. Such community materials are ordinarily not found in textbooks or other compiled sources, but must be secured first hand.

15. Close relationships should be maintained with extra-school agencies. Cooperative endeavors may develop with such agencies as the N.YA resident projects, CCC educational programs, and other community youth programs such as these conducted by the YMCA and junior service groups. For example, apprenticeship training may be undertaken in connection with the junior chamber of commerce by arranging for junior college business students to act as understudies and learners in the various activities of this organization.

16. Close articulation with other educational units is a principle to be followed by all junior colleges. Most junior college business programs are articulated fairly well with higher institutions. Less often

does the junior college consciously and deliberately build upon the high school experiences of its students. Articulation with the high school program requires frequent conferences with high school teachers and close study of the high school program so that unnecessary duplication may be avoided and proper consideration of high school experiences may be given in planning the junior college programs. In other words, junior college business programs should not be developed independently and without regard for the high school program.

17. Continuous adaptation of the business education program, both the economic living and semiprofessional types, is imperative if the curriculum is to be responsive to rapidly changing business. Continuous surveys of business within the area served by the junior college, continuous follow-up of both graduates and nongraduates is necessary. Opportunity for the instructional staff to have first-hand contacts with businessmen in the community is essential.

18. In the light of evidence which shows that a larger percentage of junior college students drop out than graduate, serious consideration should be given to the problem of the nongraduate. Follow-up studies of the drop-out and the organization of courses designed to meet his needs should result. Intensive short unit programs of from a few lectures to one year at the junior college level may be introduced in those instances where such a program will meet the needs of the drop-out student.

19. Creation of the desire and will on the part of students to continue their study of personal and social economic problems and for the purpose of securing promotion when the opportunity presents itself is important at the junior college level. The mere fact that the teaching of attitudes is difficult does not in any way lessen the importance of the problem. Continued study is closely related to the offerings in adult education.

20. Adult business education should be provided where the need otherwise is not being met. Such programs should be closely related to the offerings of the regular junior college program and should conform to the principles of adult education. Adult education should include both work of a semiprofessional nature and of a general economic nature. The former should be developed as an in-service type of program.

21. Terminal business education must take into account that as the junior college becomes more and more "the people's college," it

will serve students of varying ranges of abilities, aptitudes, and personal characteristics. Consequently the program of terminal education, dealing with occupational preparation, will prepare the worker to fit into occupations ranging from semiskilled through skilled and semiprofessional levels of competence.

Problems of terminal business education on the junior college level.

1. In what occupations are there now in operation cooperative training programs? To what extent can the junior college develop further programs that provide for work experience?
2. What are the specific instances in which there are now effective articulation programs operating between the junior college terminal education and the high school and the out-of-school youth? How can these programs be improved and the practices extended to all junior colleges?
3. What specific junior college programs of terminal education are there that are meeting effectively the problem of placement and follow-up? To what extent can these programs be improved and the practices extended to all junior colleges?
4. What are the levels of competence which business now requires of entering workers without work experience, and how effectively does the junior college terminal student meet these requirements?
5. To what extent are the present terminal business students participating in the general education program and with what results as seen from (a) the student's point of view, (b) the instructor's point of view, (c) the administrator's point of view, (d) as measured by social and economic tests of understandings and relationships?
6. What specific instances are there of terminal business programs which have been set up to serve regional areas? How can these be made more effective and extended to other areas? What are the specific areas which need regional programs of terminal business education?
7. What are the desires of the out-of-school youth who has not completed a high school program and who is not occupationally trained? Can these desires be met by an effective program of terminal education?
8. What differences, if any, should exist between the beginning courses in business of a semiprofessional nature and beginning courses for preprofessional business training?
9. What specific programs have been developed in terminal business education which deal with attitudes and traits required of busi-

ness workers? How can these be made more effective and extended to other areas?

10. To what extent do graduates of terminal business courses migrate to communities other than those served by the specific junior college and how effective is the training program in meeting the occupational needs of these migrants?

11. To what extent can a two-year program and intensive programs of one year or less operate side by side in the terminal business fields?

12. Shall terminal business programs be set up in terms of periods of time or knowledges and skills to be acquired? Upon what basis shall the decision be reached? If on a matter of time, how shall the labor market be stabilized? If on skills and knowledges, what measures shall be applied?

13. What specific instances are there at present in which the terminal business courses are set up on other than a semester basis? Is such a practice satisfactory? If so, to what extent can it be improved upon and made effective in other junior colleges?

14. What specific instances are there at present in which effective rehabilitation, retraining and intermittent training are being carried out? How can these be improved upon and made a part of all junior college programs?

15. How can the preparation and dissemination of teaching materials in the field of terminal business education be made more effective?

16. What public junior colleges are there that are now carrying on year-round programs? How are these financed? To what extent are they effective in meeting employers' needs?

17. What specific instances are there of effective placement and follow-up of terminal business students? How can these be improved and extended to all junior colleges?

18. To what extent are placement and follow-up studies changing offerings in terminal business courses and in what ways?

19. To what extent are public junior colleges making use of Federal funds for terminal business courses? Are the results satisfactory? If so, how can the practices be made more universal?

20. What are the comparative costs per student in average daily attendance in terminal business courses as compared to other terminal curricula? Are the differences significant? To what are the differences attributed?

21. What is the optimum size of a junior college for the best development of terminal business programs?

22. What are student and parent attitudes toward vocational preparation for business occupations as compared to such fields as beauty culture, hotel and restaurant work, mechanical pursuits, and the like?

23. To what extent, if any, have effective programs been developed in junior college terminal business education that are correlated with such public agencies as the NYA, CCC, and WPA? What further developments should there be in correlating these programs with the junior college?

24. To what extent is the thirteenth year of the high school program in business education being carried out and what is the relation between such programs and the terminal function of the junior college?

25. To what extent has the adult program in terminal business education been accepted as a part of the junior college program? Should such a program be extended?

26. What are the problems of training for instructors in business education and how can they be met?

10. Problems in Home Economics Terminal Education as Formulated by a Special Cooperating Committee[4]

Purposes of home economics in junior colleges. Home economics teachers in junior colleges long have been concerned as to the purposes which home economics could best serve at that level. They have been concerned also with the home economics experiences which would contribute most in achieving these purposes—whatever they might be. A part of a new educational development, they have not known just what to do. Some have been good high school teachers promoted to junior college teaching, often in their own school systems. Others have been college teachers who have seen in this new unit a broader opportunity than they individually were offered in the four-year college. Few have had any special preparation for their job as junior college teachers because no special preparation was available for them.

---

[4] Committee on Home Economics in Junior Colleges appointed by the Department of Colleges and Universities of the American Home Economics Association to cooperate with the Commission on Junior College Terminal Education. Ivol Spafford, General College, University of Minnesota, chairman; Edna P. Amidon, U.S. Office of Education, Washington, D.C.; Dorothea Beach, Bradford Junior College, Massachusetts; Genevieve Fisher, Iowa State College; Ruth Graham, Christian College, Missouri; Marion E. Gray, National Park College, Maryland; Jessie A. Harris, University of Tennessee; Wylle B McNeal, University of Minnesota; Josephine A. Marshall, Kansas State Teachers College, Pittsburg, Kansas; Winona L. Morgan, Ohio State University; Dorothy D. Scott, Ohio State University; Ruby Simpson, Furman University, Alabama; and Mattie Walker, John Tarleton Agricultural College, Texas.

This statement on "Problems of Major Concern in Building a Functioning Program of Home Economics in Junior Colleges" is the result of extended correspondence and discussion with home economists in both junior and four-year colleges and universities. Two discussion meetings were held during the annual meeting of the American Home Economics Association in Cleveland in June, 1940. One was the breakfast meeting of the Department of Colleges and Universities, the other a smaller group meeting which grew out of the larger meeting. A list of problems was then prepared by the chairman and sent to a small group of home economists who had participated in these discussions or who had previously expressed a special interest in the problem. The suggestions and criticisms made by these various home economists have been most valuable. The final statement, however, has been worded by the chairman. The responsibility for any failure to prepare a statement which would be acceptable to all who contributed at various points to the discussion or to carry out the task set for the committee rests upon the chairman alone.

A small number of junior colleges have developed courses in keeping with the basic purposes of a particular institution. Some have developed offerings with little or no emphasis on attaining skills and techniques in food preparation, clothing construction, and housewifery, believing that such learning has no place at the college level. In the main, however, the offerings have followed two general patterns. One has been a stepping-up of high school courses so as to be somewhat more difficult for the older student but not vastly different in either content or teaching procedures from those offered in the preceding years. The other has been duplicating, with no more than minor changes, the beginning home economics courses offered in the four-year professional curriculum of the senior colleges and universities.

Many new junior colleges have been established in recent years. Enrollment in those already established has increased steadily. As the place of junior colleges in the educational scheme is studied in its larger aspects, it seems important that attention be given also to problems within the various fields. No concerted effort has ever been made to study home economics in relation to the unique purposes of the junior college, to find out the needs of those students which can be met most effectively by home economics, to find out the types of educational experiences, plant and equipment, text and source books which would be most effective, or to learn the kind of teacher-education program which best would prepare home economics teachers for the junior college. Nor has any special effort been made to find out the practices in those institutions that have been most successful in building a functioning program in order that others may profit by their experiences. It is within these areas that the problems of special concern to those interested in a more effective program of home economics lie.

Home economics may serve three basic purposes in junior colleges. The purpose broadest in scope and which has meaning for the largest number of students is that of general education. This may be education in home and family living, personal growth and development, vocational orientation and guidance, or social-civic understanding. Its greatest values for general education lie in the realm of personal and home living, although its other values for some students should not be overlooked.

A second purpose of home economics is that of providing vocational preparation. Home economics offers preparation for many vocations which employ women and for some which employ men. Such vocations range from the semiskilled to the highly professional and are to be found in all phases of home economics. They have to do with the feeding, clothing, and housing of people, with the care and growth of children, with the care of the sick, and with management and human relationships. Gainful employment may be found in the private home, in business, and in industry. Home economics also has a contribution to make to other types of vocations through service and supporting courses. Those preparing for the distributive trades, social welfare, and health work have need for experiences in this field. Home economics, excluding homemaking as a vocation, will have vocational value for a smaller number than for general education. The vocational goal is important and, to the extent that talents and abilities for wage-earning are to be found in this field, they should be cared for by home economics.

The third purpose which home economics may serve at this level has to do with increasing the general employability and job satisfaction of the individual. The values within home economics for this purpose generally have been neglected. The wage-earning goal is important to most young people today. Young women want employment at least for a few years; young men for a long period. To the extent that home economics may increase their employability and/or their satisfaction on the job, it is important for a large number of them.

The ability to work happily with other people, to select suitable and becoming clothes, to wear them well, to be well-groomed, to make a pleasing appearance, to have good manners, to be at ease in the ordinary relationships of life contributes to personal happiness, but it also contributes to success on the job. The habit of weighing values in the spending of money, of selecting nutritious food, of making one's place of living attractive and restful, of choosing clothes that will wear well, of giving them the care needed, of following a healthful regime helps in getting more of life's satisfactions for the money available, and, in turn, adds to satisfaction with the job. The individual's philosophy of life has much to do with the abilities and habits he acquires. All of these represent learnings of value in all the relationships of life, and learnings to which home economics has much to contribute in their achieving. When young people in high school and junior college are looking forward to gainful employment, the motivation which comes from a recognition of their own vocational potentialities may be a much more powerful factor for acquiring such learnings, however, than that connected with any other relationships of life.

Fundamentally the most important task before those working in junior colleges, whether teachers within the field of home economics, counselors, or administrators, is to build for the individual school the program that best will serve the needs of its group. Only in this way may the needs of the individual student be met through a curriculum tailor-made for him. To do this successfully requires the study of many aspects of the junior college situation and the acquiring of a background for and the habit of looking more critically at the junior college program as having meaning and purpose of its own. It demands experimentation with new techniques of curriculum building, new types of educational experiences, and new instruments of evaluation.

On the basis of the preceding principles, the committee feels the following are specific problems needing special study.

I. *The present situation in regard to home economics in junior colleges with emphasis on finding out—*

  A. The types of students attending junior colleges; their reasons for being there; their economic status and family background; the kind of students who take work in home economics; reasons why those not enrolled do not take the work; the satisfactions and dissatisfactions of students with what they are getting and have gotten in home economics and in other fields bearing on education for personal and home living; other experiences and/or changes in content in present offerings which they would like; the part they have taken in planning their present program and the part they would like to take; what they do when they leave college; what they are doing five or 10 years later.

  B. A representative sampling of those situations which have been most successful in developing a functioning program of home economics for general education, for vocational education including homemaking, and for increasing general employability and job satisfaction; the procedures used in building the curriculum; the means used in evaluation; the special offerings and experiences provided; plant, equipment, and library materials found to be most useful; the special preparation of the teachers.

C. The teacher-preparation which has proved to be most worthwhile—both college study and special experiences; the needs which teachers recognize for more and/or different preparation and experiences; the needs administrators and students recognize for more and/or different experiences on the part of teachers.

D. The values and the weaknesses which administrators, counselors, and teachers in other fields see in home economic offerings as they are now given for general education, for vocational education including homemaking, and for increasing general employability and job satisfaction.

E. Conditions which contribute to developing good programs; obstacles which interfere most frequently and/or seriously with developing a functioning program of home economics for general education, for vocational education including homemaking, and for increasing general employability and job satisfaction.

F. Problems which individual colleges and individual teachers are having in curriculum building; in directing students in the variety and types of learning experiences needed; in guiding students in directing their own learning; and in evaluating outcomes.

Study such as is indicated here could begin with a questionnaire to secure background data in regard to home economics in a representative sampling of junior colleges and to locate those institutions which have gone furthest in developing a functioning program. Administrators, curriculum workers, home economics teachers, and students should all be called upon to supply data.

A study of the present situation to be most useful, however, would need to be continued through visits to selected institutions and through conferences with small groups of people. The present situation has much of value in it. Worth-while experiences if made available to other colleges would save time and short-cut the process of building a more effective program of home economics at this level.

II. *The present and future needs of students for education to which home economics can contribute in the areas of—*
   - A. Home and family living
   - B. Vocational education including homemaking and preprofessional preparation
   - C. Increasing general employability and job satisfaction

Too little is known about the needs of students in general in these areas or the part that home economics can and should play in meeting their needs at this level. Some needs may be of immediate concern; others of concern largely in the future. Some may be transitory; others continuing. Some may be of importance to a few students only; others to a large group. Students have a part to play in identifying their needs. Many other persons, however, have a contribution to make also—teachers, graduates of junior colleges, parents, and other adults. A wide variety of factors influences the needs of a particular group—the larger society, the community, the homes of students—the mores of adult groups to which these youth belong and into which they must later become integrated.

Other experiences which students have and may be expected to have in and outside of school have a bearing on what home economics should do in meeting their needs. The job is not one for home economics alone, but for the most intelligent planning of all concerned based on a knowledge of students' needs in present society.

III. *The development of criteria and techniques for evaluating home economics offerings in junior colleges in terms of—*
   - A. Aspects peculiar to junior colleges in general
   - B. Aspects peculiar to a particular institution
   - C. The program of the individual student

Many junior colleges are satisfied with their present program without having any other than subjective judgment for determining its value. Others are dissatisfied but do not know how to locate either the strengths which should be preserved or the weaknesses which should be overcome. The program of the individual student is the important thing in the end and, to the extent that it meets his needs in present society, it is a good program.

Schools have not made much progress yet in evaluating the individual student's program. The student's program will be good in part as schools develop techniques for finding out his needs and for building cooperatively with him a program that will meet these needs. It will be good also in part as the school has a rich and suitable body of experiences from which to draw in building each individual program.

Suggestive criteria and techniques of evaluation and guiding principles for developing an evaluation program within the individual institution should be developed through a study of present practices and through experimentation.

IV. *Occupations offering gainful employment for which the home economics departments of junior colleges may and should offer vocational preparation with emphasis on finding out—*

The vocational openings locally and in the larger territory; the extent and ways in which these are the same or different from the occupations for which the high schools can offer and are offering vocational preparation; for those that are the same, the extent and ways in which preparation at the junior college level should be the same or different; the problems which are arising and will arise as the period of schooling for an increasing number of young people is extended upward.

Too little is known about the employment opportunities for students who are or have been in junior colleges or of the education of a direct vocational nature which these colleges could offer. This is a problem for intensive study. One result should be the developing of techniques which the individual institution or those within a region could use in making their own study or in keeping up to date in regard to job openings and job training demands. Home economists interested in vocational education have given major attention to education for homemaking, leaving the field of gainful employment largely to the trades and industrial field.

V. *Curriculum offerings in home economics most fruitful for meeting student needs for—*

A. General education with special emphasis on education for personal living, home and family life, and vocational guidance
B. Vocational education including homemaking and also including service courses for vocations not drawing on home economics for their primary training
C. Increasing general employability and job satisfaction

Experimentation is needed to find out the educational experiences which home economics can provide for meeting the needs of students at the junior college level. At present the needs of the small number who may go on to the four-year college have controlled largely the home economics offerings in junior colleges. Major emphasis in curriculum building should be directed instead to that large number of students who do not expect to go further or who, expecting to, are not likely to do so.

Those students who plan to go into a highly specialized professional field later should face early the necessity to acquire a more extended and/or different background of preprofessional preparation than the junior colleges can afford to offer. This will be true especially for those who wish to go into professions building on a heavy science background, such as dietetics and institutional management. If such students, knowing this, continue in the junior college, they should expect to take additional time to get the necessary technical background for their field of specialization before entering upon professional training. This aspect of the problem should be studied jointly by junior and four-year professional colleges—the latter being concerned especially in finding out which of their requirements are real in terms of future professional needs and which are merely hurdles.

Another aspect of the problem of building a functioning curriculum at this level is the working out of a sound relationship between high school home economics and that offered in the junior college.

VI. *The development of techniques by which staff members, including administrators, counselors, and teachers in the various subject-matter fields may work together in—*

   A. Determining student needs
   B. Providing a planned program using all the resources of the college for the individual student's growth and development, for home and family-life education, for increasing general employability and job satisfaction, for vocational education and for preprofessional preparation.

No field or department can make its richest contribution in the long run except as it works in full cooperation with other fields and departments. Home economics has much more to give to a broad educational program than is now being utilized. Other fields have more to give to education for family living—a phase of education commonly thought of as belonging to home economics, especially by the home economist—than has been recognized. Those in other fields can render valuable service by helping home economists evaluate their offerings recognizing values which should be extended to the larger group and uncovering weaknesses which should be eliminated.Those in home economics also may help other fields see what they have to give that they have not hitherto recognized.

VII. *An effective program of teacher education for junior colleges*

More needs to be known about both the college study and other experiences which junior college teachers have found worth-while as preparation for their work and those additional ones for which they feel a need. Many present teachers need and would like to have their present preparation enriched. As new offerings are developed in junior colleges and present offerings are rebuilt on a more functional basis, still other needs for teacher education will arise. Study conferences and summer workshops offer the most promising immediate methods for attacking the problem of better teacher preparation. Changes in course offerings in teacher-educating institutions to meet the needs of this special and growing group of teachers must inevitably follow any extensive development in junior colleges of their own unique program.

Conclusion

In this chapter more than 150 problems and questions of various types have been stated. Not all are of equal importance. Not all are entirely independent of each other. But all are connected in some way with the general field of terminal education in the junior college.

Such a list should be of value to junior college administrators, to faculty curriculum committees, to program chairmen, to faculty groups planning programs of professional meetings, to summer workshop leaders, to students searching for suitable topics for masters' or doctoral theses, to university professors giving courses on the junior college or related to it, and to all others interested in junior college education.

Methods of attack will vary widely. Some of these problems are relatively easy to solve. Others may require extended research. Some will require extensive institutional experimentation; some, refined statistical analysis; some, collection and interpretation of the opinions of competent judges; some, modification of existing legislation; some, detailed follow-up studies; some, cooperative effort on the part of a group of junior colleges. All, however, are worthy of thoughtful consideration on the part of those interested in planning for the next decade curricular offerings and personnel procedures better adapted to the needs of the rapidly increasing number of students who will probably complete their formal education in the junior college. The solution of these problems must be left to the future.

APPENDIXES

APPENDIX A. TERMINAL CURRICULA OFFERED

Table XXVIII. Terminal Curricula Offered by Junior Colleges and Enrollments in Them, 1938-39
Supplement to Table XXVIII
Lists Supplementary to Table XXVIII

APPENDIX B. SUPPLEMENTARY TABLES

Table XXIX. Number of Junior Colleges Offering Terminal Curricula and Number and Percentage of Students Enrolled in Them, 1938-39—Public Institutions
Table XXX. Number of Junior Colleges Offering Terminal Curricula and Number and Percentage of Students Enrolled in Them, 1938-39—Private Institutions
Table XXXI. Number of Junior Colleges Offering Curricula in Each Terminal Field, 1938-39
Table XXXII. Number of Students Enrolled in Each Terminal Field, 1938-39
Table XXXIII. Continuation of Junior College Students—Public Institutions
Table XXXIV. Continuation of Junior College Students—Private Institutions
Table XXXV. Time Devoted to Occupational Courses and Teaching and Nonteaching Experience for Instructors in Terminal Curricula
Table XXXVI. Percentage Summary of Guidance and Personnel Data from *Information Blank* Classified by Size and Control of Junior Colleges

APPENDIX C. FEDERAL AID FOR JUNIOR COLLEGES

Extracts from Smith-Hughes Act
Extracts from George-Deen Act
Junior Colleges Receiving Federal Aid Under the Smith-Hughes and George-Deen Acts, 1939-40, and Fields for Which This Aid Was Given

APPENDIX D. LIST OF COOPERATING JUNIOR COLLEGES

Institutions which Furnished Significant Data on *Information Blank* as Summarized in Chapters V and VI

APPENDIX E. FORMS USED

Figure 26. One Page of Form Used in Gathering Information for *American Junior Colleges*
Figure 27. Preliminary Information Blank Sent to All Junior Colleges
Figure 28. Information Blank (Part A) Sent to All Junior Colleges Which Promised to Cooperate in the Study (4 pages)
Figure 29. Information Blank (Part B) Sent to All Institutions Reporting In *American Junior Colleges* a General Terminal Curriculum
Figure 30. Information Blank (Part C) Sent to All Institutions Reporting In *American Junior Colleges* Terminal Vocational Curricula (2 pages)
Figure 31. Information Blank Concerning State and Regional Conferences

Appendix A—Table XXVIII. TERMINAL CURRICULA OFFERED

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
New England										
CONNECTICUT										
Commerce, Junior College of	–	–	–	37	40	–	–	36	–	–
Connecticut, Junior College of*	–	–	–	–	–	–	–	3	–	–
Hillyer Junior College*	0	–	–	55	–	0	0	0	45	0
Larson Junior College*†	–	–	–	0	–	–	–	68	–	–
New Haven YMCA Junior College	–	–	–	57	117	–	–	–	–	–
Physical Therapy, Junior College of*†	–	–	–	–	–	–	–	–	–	–
MAINE										
Ricker Junior College	–	–	–	12	–	–	–	10	–	–
Westbrook Junior College*	57	–	–	2	–	–	–	45	–	–
MASSACHUSETTS										
Bradford Junior College	89	–	–	–	–	–	–	–	–	–
Chamberlayne Junior College*†	–	–	–	–	–	–	–	26	–	–
Lasell Junior College*†	–	–	–	–	–	–	–	105	–	–
Nichols Junior College*	+	–	–	+	–	+	+	–	–	–
Pine Manor Junior College	156	–	–	–	–	–	–	–	–	–
Worcester Junior College*	–	–	–	–	–	–	–	–	–	–
NEW HAMPSHIRE										
Colby Junior College	–	–	–	–	–	–	–	65	–	–
Tilton Junior College	–	–	–	23	–	–	–	–	–	–
VERMONT										
Green Mountain Junior College*	–	–	5	29	–	–	–	30	–	–
Vermont Junior College	–	–	–	10	–	–	–	–	–	–
Middle States										
CANAL ZONE[1]										
DISTRICT OF COLUMBIA										
Georgetown Visitation Junior College*†	4	–	–	–	–	–	–	12	–	–
Holton-Arms Junior College	29	–	–	–	–	–	–	–	–	–
Mount Vernon Seminary*†	22	–	–	–	–	–	–	–	–	–
MARYLAND										
Baltimore, Junior College of University of*	–	–	–	9	38	–	–	10	–	–
Chevy Chase Junior College	7	–	–	–	–	–	–	4	–	–
Columbia Junior College*	–	–	–	55	–	–	–	–	–	–
Mount Saint Agnes Junior College*	–	–	–	12	–	–	–	–	–	–
National Park Junior College	89	–	–	–	–	–	–	–	–	–
St. Mary's Female Seminary—Junior College*	10	–	–	–	–	–	–	8	–	–
NEW JERSEY										
Bergen County, Junior College of	–	–	–	–	–	–	–	25	–	30
Centenary Junior College	90	–	–	–	–	–	–	6	–	–
College of South Jersey*	–	–	–	–	–	–	–	15	–	–
NEW YORK										
Bennett Junior College	–	–	–	–	–	–	–	5	–	–
Briarcliff Junior College†	8	–	–	2	–	–	–	10	–	–
Cazenovia Seminary*	21	–	1	1	–	–	–	10	3	–
Concordia Collegiate Institute*	10	–	–	–	–	–	–	–	–	–
Finch Junior College†	22	–	–	23	–	–	–	–	–	–
Packer Collegiate Institute	85	–	–	–	–	–	–	–	–	–
PENNSYLVANIA[2]										
Hershey Junior College	51	–	–	30	–	–	–	–	–	–
Ogontz Junior College	16	–	–	–	–	–	–	5	–	–
Penn Hall Junior College*	–	–	–	–	–	–	–	30	–	–
Scranton-Keystone Junior College*†	–	–	–	17	–	–	–	11	3	–
Valley Forge Military Junior College	–	–	–	3	–	4	8	–	–	–
Williamsport Dickinson Seminary*	–	–	–	17	–	–	–	22	–	–

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[1] Terminal curricula are also offered by Canal Zone Junior College. See supplementary lists, pages 230–35.

[2] Terminal curricula are also offered by Alliance College and Bucknell University Junior College. See supplementary lists, pages 230–35.

BY JUNIOR COLLEGES AND ENROLLMENTS IN THEM. 1938–39

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–
–	0	0	0	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	0	0	–	0	25	0	4	0	6	0	–	5	–	–	–
–	10	60	93	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	1	1	–	–	63	–	–	6	–	–	–	–	–	–	1
–	–	–	–	–	–	6	13	–	–	–	–	40	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	2	–	–	–	–	–	5	–	–	–	–	–	–	–
–	–	–	–	–	–	16	4	–	5	44	–	46	–	–	–	–	–	–	–	–
–	–	–	–	–	–	+	–	–	–	–	–	–	+	–	–	–	–	–	–	–
–	–	–	–	–	–	–	7	–	–	–	–	72	–	–	–	–	–	–	–	–
–	–	24	145	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	15	4	–	–	66	–	8	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	8	6	–	–	7	–	8	8	1	24	–	–	–	–	–
–	–	9	–	–	–	–	–	–	–	–	–	10	8	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	6	3	–	4	–	–	8	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	–	–
–	–	–	–	–	–	6	1	–	1	–	–	8	0	–	0	–	–	–	–	–
–	–	–	–	–	–	–	6	–	–	–	–	–	–	–	–	–	–	22	–	25
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	21	10	–	16	–	–	21	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	1	–	–	–	–	1	–	–	–	–	–	–	–	–
10	–	–	–	–	–	–	1	3	–	11	4	2	2	–	–	–	–	–	–	–
–	–	–	–	–	–	0	0	–	–	–	0	0	0	0	0	0	–	0	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	8	6	–	6	–	–	6	4	–	–	–	0	8	–	–
–	–	–	–	–	–	2	1	–	–	–	3	–	–	1	–	–	–	–	–	2
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	28	18	–	30	–	–	38	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	8	2	–	3	–	–	20	–	–	–	–	–	–	–	–
–	–	–	–	–	–	24	3	–	4	–	–	6	3	–	2	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	30	–	0	3	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–
–	–	–	–	–	–	11	6	–	–	–	–	–	–	–	–	–	–	–	–	–

Table XXVIII.—*Continued.*

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
North Central										
ARIZONA										
Gila Junior College*	–	–	–	6	–	–	–	–	–	–
Phoenix Junior College*	187	–	–	21	–	–	–	62	–	13
ARKANSAS										
Arkansas Polytechnic College*	–	–	–	–	–	–	–	–	–	–
Arkansas State Agricultural & Mechanical Coll.*	–	–	–	97	–	–	–	–	–	–
Central Arkansas, Junior Agricultural College	5	6	–	3	–	–	3	2	–	1
Dunbar Junior College	–	–	–	–	–	–	–	–	–	–
Fort Smith Junior College*†	–	–	–	12	–	–	–	–	–	–
Little Rock Junior College*.	–	–	–	31	–	–	–	53	–	–
COLORADO[3]										
Colorado Woman's College*	0	–	–	83	–	–	–	0	–	–
Mesa County Junior College*	–	7	–	–	–	–	–	–	–	–
Pueblo County Junior College*	–	–	–	38	–	–	–	–	–	–
ILLINOIS[4]										
Blackburn College.	–	–	–	–	–	–	–	–	–	–
Evanston Collegiate Institute	40	–	–	16	–	–	–	–	–	–
Herzl Junior College*†	–	–	–	70	–	–	–	57	3	–
La Salle-Peru-Oglesby Junior College*	0	–	–	–	–	–	–	–	–	–
Lincoln College	2	–	–	4	–	–	–	20	–	–
Morgan Park Junior College..	–	–	–	–	–	–	–	20	–	–
Monticello College	31	–	–	–	–	–	–	–	–	–
Morton Junior College*	–	–	–	–	–	–	–	91	–	–
North Park College	–	–	–	0	–	–	–	37	–	–
Springfield Junior College*	–	–	–	9	–	–	–	–	–	–
Woodrow Wilson Junior College*†.	–	–	–	301	–	–	–	184	20	–
Wright Junior College*†.	–	–	–	157	–	–	–	221	120	–
INDIANA										
Kokomo Junior College	–	–	1	–	–	–	–	–	–	1
Vincennes University Junior College*	8	–	–	–	–	–	–	–	–	–
IOWA[5]										
Bloomfield Junior College. ..	–	–	–	–	–	–	–	–	–	–
Dowling College*.	–	–	–	10	–	–	–	–	–	–
Elkader Junior College*†	–	–	3	–	–	–	–	–	–	–
Ellsworth Junior College*	–	–	–	–	–	–	–	–	–	–
Emmetsburg Junior College	–	–	–	–	–	–	–	–	–	–
Estherville Junior College*	37	–	–	12	–	–	–	–	–	–
Fort Dodge Junior College*	–	–	–	–	–	–	–	–	–	–
Graceland College*† .	34	–	–	–	–	–	–	18	28	–
Mount Mercy Junior College	12	–	–	–	–	–	–	23	–	–
Mount St. Clare Junior College*	–	–	–	–	–	–	–	–	–	–
Muscatine Junior College*.	–	–	–	–	–	–	–	14	–	–
Northwestern Junior College	–	–	–	–	–	–	–	7	–	–
Ottumwa Heights College	5	–	–	21	–	–	–	0	–	–
Red Oak Junior College*	–	–	–	–	–	–	–	–	–	–
Waldorf College*	0	–	–	39	–	–	–	34	–	–
Webster City Junior College	–	–	–	–	–	–	–	13	–	–
KANSAS[6]										
Arkansas City Junior College*†. .	40	3	2	27	–	–	–	22	33	–
Central College.	2	–	–	0	–	–	–	3	0	–

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[3] Terminal curricula are also offered by Junior College of Southeastern Colorado. See supplementary lists, pages 230–35.

[4] Terminal curricula are also offered by Lyons Township Junior College and Thornton Junior College. See supplementary lists, pages 230–35.

[5] Terminal curricula are also offered by Burlington Junior College, Centerville Junior College, Eagle Grove Junior College, Grand View College, Marshalltown Junior College, Sheldon Junior College, Tipton Junior College, Waukon Junior College, and Washington Junior College. See supplementary lists, pages 230–35.

[6] Terminal curricula are also offered by Hesston College, Iola Junior College, and St. Joseph's College. See supplementary lists, pages 230–35.

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	1	–	–	–	–	5	–	–	–	–	–	–	–	–
–	–	–	–	5	–	10	12	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	113	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	56	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	80	–	2
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	55	–	–
–	–	–	5	–	–	4	–	–	–	–	–	1	–	–	–	–	–	5	–	–
–	–	–	–	–	–	–	10	–	12	–	–	–	11	–	–	–	–	–	–	–
–	–	–	–	–	–	17	36	–	13	–	0	0	21	0	6	–	–	30	–	–
–	–	–	–	–	0	10	20	–	–	–	–	–	11	1	8	–	–	26	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	35
10	–	–	–	–	–	1	2	–	–	15	–	–	2	–	–	–	–	–	–	25
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	67	–	–
–	–	–	–	–	–	2	2	–	–	2	–	–	4	5	–	–	–	45	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	37	–	–
–	–	–	–	–	–	0	25	–	–	–	29	–	–	–	–	–	13	–	–	–
12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	31	–	–
56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
129	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	1	–	–	–	–	–	–	–	–	–	1	1	–	3	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9	–	–
–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10	–	–
–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	11	1	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19	–	–
–	–	–	–	–	–	–	0	–	–	–	–	20	–	–	–	–	–	28	–	5
–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	1	–	–	29	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34	–	–
–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	33	–	–
–	–	–	–	–	–	–	4	–	–	–	27	8	–	–	–	–	–	35	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	69	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–	–
–	–	–	–	–	2	–	9	–	–	–	4	11	–	1	–	–	–	31	–	–
–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–	32	–	–

Table XXVIII.—*Continued.*

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
North Central (continued)										
Chanute Junior College*	38	–	–	35	–	–	–	–	16	–
Coffeyville Junior College*	76	–	–	–	–	–	–	81	–	–
Dodge City Junior College*	–	–	–	34	–	–	–	26	6	–
El Dorado Junior College†	8	1	1	80	–	–	–	–	18	4
Garden City Junior College*	–	–	–	54	–	–	–	0	–	–
Highland Junior College	–	–	–	23	–	–	–	–	–	–
Hutchinson Junior College*	+	–	–	–	–	–	–	–	–	–
Independence Junior College*	222	–	–	–	–	–	–	–	–	–
Kansas City Junior College*	–	–	2	–	–	–	–	–	4	–
Paola, College of*	–	–	–	–	–	–	–	–	–	–
Pratt Junior College*	28	–	–	10	–	–	–	16	–	–
Sacred Heart Junior College	10	–	–	2	–	–	–	–	–	–
St. John's Lutheran College†	3	–	–	23	–	–	–	12	–	–
Tabor College	–	–	–	6	–	–	–	1	–	–
MICHIGAN[7]										
Bay City Junior College*	54	–	–	15	14	–	–	27	16	–
Flint Junior College*†	31	–	–	–	–	–	–	46	–	–
Fordson Junior College*	10	–	–	10	–	–	–	10	10	–
Gogebic Junior College*	–	–	–	–	–	–	–	62	–	–
Grand Rapids Junior College*	76	–	–	70	–	–	6	60	30	–
Highland Park Junior College*	–	–	5	–	–	–	–	–	–	–
Jackson Junior College*	49	–	–	17	–	–	–	42	–	–
Muskegon Junior College*	–	–	–	–	–	–	–	18	–	–
Port Huron Junior College*	–	–	–	58	–	–	–	–	–	–
Presentation Junior College	–	–	–	–	–	–	–	–	–	–
MINNESOTA[8]										
Crosby-Ironton Junior College	10	–	–	0	–	–	–	9	–	3
Duluth Junior College*†	–	–	–	46	–	–	–	39	–	10
Ely Junior College*	–	1	5	1	–	–	–	14	–	–
Eveleth Junior College*	18	–	–	101	–	–	–	–	–	–
Hibbing Junior College*	–	–	–	–	–	–	–	100	–	–
Itasca Junior College*†	–	–	–	0	–	–	–	21	0	–
Rochester Junior College*†	–	–	2	31	–	–	–	–	–	–
Tracy Junior College	–	–	–	8	–	–	–	–	–	–
Virginia Junior College*†	–	–	–	21	–	–	–	73	–	–
Worthington Junior College*	10	23	–	24	–	–	–	17	–	–
MISSOURI[9]										
Christian College*	–	–	–	–	–	–	–	21	–	–
Cottey Junior College	–	–	–	–	–	–	–	24	–	–
Flat River, Junior College of*	36	–	–	25	–	–	–	–	–	–
Hannibal-LaGrange College	13	–	–	–	–	–	–	15	–	–
Joplin Junior College*†	–	–	–	–	–	–	–	66	–	–
Kansas City, Junior College of*	–	–	–	90	–	–	–	–	–	–
Lincoln Junior College	–	–	–	–	–	–	7	–	–	–
Moberly Junior College*	–	–	–	21	–	–	–	16	–	–
Monett Junior College*	24	–	–	–	–	–	–	–	–	–
St. Joseph's Junior College*	–	–	–	–	–	–	–	–	–	–
Southwest Baptist College†	40	2	–	9	–	–	1	–	5	2
Stephens College*	–	–	–	–	–	–	–	137	–	–
Trenton Junior College	–	2	–	–	–	–	–	–	–	–
William Woods College	+	–	–	+	–	–	–	+	–	–

---

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[7] Terminal curricula are also offered by Spring Arbor Junior College. See supplementary lists, pages 230–35.

[8] Terminal curricula are also offered by Albert Lea Junior College, Brainerd Junior College, and Concordia College. See supplementary lists, pages 230–35.

[9] Terminal curricula are also offered by Jefferson City Junior College, Kemper Military School, Notre Dame Junior College, and Wentworth Military Academy. See supplementary lists, pages 230–35.

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	8	10	–	–	–	–	10	5	5	2	–	–	10	–	–
–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	8	–	–	35	–	–
–	–	–	1	–	–	–	4	–	–	–	1	8	4	–	–	1	–	42	–	–
–	1	–	–	–	–	–	10	–	1	–	2	4	11	–	6	–	1	65	–	–
–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–	17	–	–
–	–	–	–	–	–	–	–	–	–	7	–	–	2	–	–	–	–	62	–	–
–	–	–	–	–	+	–	+	–	–	–	+	–	–	–	+	–	–	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	2	–	–	–	–	–	–	–	7	2	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	14	–	–
–	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	8	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	16	–	–
–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	6	–	–
–	–	–	–	–	–	1	6	–	–	–	–	–	–	–	–	–	–	54	–	27
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	28	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	–	–	–	–	–	26	–	–	–	–	55	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	17	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	28	–	–
–	–	–	–	–	–	–	–	–	–	1	–	–	2	–	–	–	–	–	–	–
–	6	10	8	–	–	–	–	–	–	3	–	–	3	2	–	–	7	–	–	–
–	–	–	–	–	–	1	–	–	–	–	2	–	4	–	2	–	1	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	0	0	–	–	0	0	–	–	–	–	0	0	–	0	–	–	–	0	–
–	–	–	–	–	–	1	–	–	–	39	–	–	3	–	1	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	16	–	–	–	–	–	–	17	4	2	–	5	8	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	90	–	–
–	–	–	–	–	–	–	4	–	–	–	–	–	4	–	–	–	2	57	–	–
–	–	–	–	–	–	–	2	–	–	–	–	–	18	–	–	–	–	26	–	–
–	–	–	–	–	–	–	–	–	–	–	71	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	18	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25	–	–
–	–	–	1	–	1	1	–	–	–	–	–	–	1	–	1	–	–	12	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	45	–	–
–	1	–	–	–	–	2	4	–	–	–	–	3	4	1	–	–	–	159	1	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	32	–	–
–	–	–	–	–	–	+	+	–	–	+	–	+	+	+	+	–	–	+	–	–

Table XXVIII.—*Continued.*

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
North Central (continued)										
NEBRASKA										
Hebron College*	3	–	–	5	–	–	–	–	–	–
Luther College	–	–	–	12	–	–	–	0	–	–
McCook Junior College†	–	–	–	22	–	–	–	–	–	–
Scottsbluff Junior College*	–	–	–	4	–	–	–	–	–	–
NEW MEXICO										
New Mexico Military Institute*	–	–	–	23	–	–	–	–	–	–
NORTH DAKOTA										
North Dakota School of Forestry†	–	–	–	9	–	–	–	29	–	–
North Dakota State School of Science	–	–	–	103	–	–	–	41	121	0
OHIO[10]										
OKLAHOMA[11]										
Altus Junior College*	14	–	–	–	–	–	–	14	5	–
Carnegie Junior College*	–	–	–	3	–	–	–	2	–	–
El Reno Junior College	–	–	–	–	–	–	–	12	–	–
Kiowa County Junior College*	0	–	–	10	–	–	–	5	–	–
Murray State School of Agriculture*	–	+	–	+	–	–	–	+	+	–
Northeastern Oklahoma Junior College*	0	–	–	0	–	–	–	20	–	2
Okmulgee Junior College*	–	–	–	23	–	–	–	–	–	–
Sapulpa Junior College*	–	–	–	13	–	–	–	–	–	–
University Junior College*	–	–	–	129	–	–	–	–	–	–
SOUTH DAKOTA										
Mount Marty Junior College	–	–	–	–	–	–	–	–	–	–
Notre Dame Junior College	–	–	–	–	–	–	–	–	–	–
Wessington Springs College	5	–	–	3	–	–	–	–	–	–
WEST VIRGINIA										
Greenbrier College	+	–	–	–	–	–	–	+	–	–
Potomac State School†	–	33	4	28	–	–	–	29	–	–
WISCONSIN[12]										
Southern										
ALABAMA										
Alabama State Agricultural & Mechanical Inst.	–	62	–	–	–	–	–	–	70	–
Marion Institute	–	–	–	27	–	–	–	–	34	–
Snead Junior College*	–	–	–	38	–	–	–	–	1	–
Stillman Institute	6	–	–	–	–	–	–	–	–	–
FLORIDA[13]										
Bethune-Cookman College*	–	–	–	6	–	–	–	–	–	–
Florida Normal & Industrial Institute	–	–	–	–	–	–	–	–	–	–
GEORGIA[14]										
Abraham Baldwin Agricultural College*	–	385	–	–	–	–	–	–	–	–
Andrew College	–	–	–	–	–	–	–	20	–	–
Fort Valley State College	–	–	–	–	–	–	–	–	–	–
Georgia Southwestern College*	–	–	–	–	–	–	–	–	–	–
Middle Georgia College*	257	–	–	45	–	–	5	10	40	–
North Georgia College	150	–	–	40	–	–	–	6	–	–
South Georgia College	–	–	–	51	–	–	–	–	–	10
West Georgia College†	23	–	–	–	–	–	–	–	–	–

---

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[10] Terminal curricula are offered by Rio Grande College. See supplementary lists, pages 230–35.

[11] Terminal curricula are also offered by Bacone College, Cameron State Agricultural College, Connors State Agricultural College, Duncan Junior College, Eastern Oklahoma A. & M. College, Muskogee Junior College, Sayre Junior College, Seminole Junior College, and Woodward Junior College. See supplementary lists, pages 230–35.

[12] Terminal curricula are offered by the Extension Division of the University of Wisconsin. See supplementary lists, pages 230–35.

[13] Terminal curricula are also offered by Palm Beach Junior College and St. Petersburg Junior College. See supplementary lists, pages 230–35.

[14] Terminal curricula are also offered by Armstrong Junior College, Junior College of Augusta, Georgia Military College, Gordon Military College, Norman Junior College, Reinhardt College, and Young L. G. Harris College. See supplementary lists, pages 230–35.

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–	17	–	–
–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	39	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	–	38	–	–
–	–	–	–	–	–	–	–	–	–	–	12	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	0	0	–	–	0	–	–	–	–	–	–	2	34	–	–	–	–	4	–	–
–	–	–	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	2	–	–	–	–	3	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	0	–	–	–	–	0	–	–	–	–	–	5	–	–
–	–	–	–	–	–	–	+	–	–	–	–	+	+	–	–	–	–	–	–	–
–	–	–	–	–	–	2	14	–	–	–	–	0	5	–	1	–	–	–	–	0
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	2	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	16	–	–	–	–	–	–	28	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	88	–	–
–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	70	–	6
–	–	–	–	–	–	+	+	–	–	–	+	–	+	–	+	–	–	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	131	–	–	–	–	–	132	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	2	–	–	–	–	10	–	–	–	–	–	44	–	–
–	–	–	–	–	–	3	2	–	–	–	–	5	–	5	1	1	2	113	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	166	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	160	–	–
–	–	–	–	–	–	–	–	–	–	–	–	105	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	78	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	103	–	–
–	–	–	–	–	–	–	–	–	–	–	–	30	–	–	5	–	–	35	–	–
–	–	–	–	–	–	–	–	–	–	–	–	20	–	–	5	–	–	75	–	–
–	–	–	–	–	–	–	20	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	128	–	–

Table XXVIII.—*Continued.*

Institutions	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
Southern (continued)										
KENTUCKY[15]										
Bethel Woman's College	–	–	–	23	–	–	–	–	–	–
Campbellsville College	75	7	–	3	–	–	–	10	–	–
Caney Junior College	–	–	–	–	–	–	–	–	–	–
Lees Junior College	–	–	–	–	–	–	–	–	–	–
Nazareth Junior College	–	–	–	8	–	–	–	–	–	–
Paducah Junior College	–	–	–	24	–	–	–	–	–	–
Pikeville College	–	–	–	–	–	–	–	–	–	–
Sacred Heart College	–	–	–	–	–	–	–	–	–	–
St. Catharine Junior College	0	–	–	0	–	–	–	–	–	–
Sue Bennett College	–	–	–	20	–	–	–	–	–	–
LOUISIANA										
Dodd College*	–	–	–	–	–	–	–	29	–	–
Northeast Junior College*	–	–	–	75	–	–	–	–	–	–
MISSISSIPPI[16]										
Gulf Park College†	12	–	–	–	–	–	–	4	–	–
East Central Junior College*	20	28	–	24	–	–	–	60	–	–
Harrison-Stone-Jackson Junior College	32	20	–	19	–	–	6	21	–	2
Hillman College	–	–	–	–	–	–	–	–	–	–
Holmes Junior College*	–	0	–	0	–	0	0	0	–	–
Jones County Junior College*	+	+	–	+	–	–	–	–	–	–
Meridian Junior College*	48	–	–	11	–	–	–	15	–	–
Okolona Industrial School	–	–	–	–	–	–	–	–	–	–
Pearl River Junior College*	–	–	–	19	–	–	–	–	–	–
Southwest Mississippi Junior College	27	3	1	5	–	–	–	16	–	2
Sunflower Junior College*	20	10	–	35	–	–	–	–	–	–
Whitworth Junior College*	–	–	–	–	–	–	–	+	–	–
Wood Junior College*	–	–	–	28	–	–	–	–	–	–
NORTH CAROLINA[17]										
Brevard College*	14	10	–	40	–	–	–	10	–	–
Campbell College*	–	12	–	80	–	–	–	–	–	–
Chowan Junior College*	–	–	–	20	–	–	–	5	–	–
Lees-McRae College	–	–	–	–	–	–	–	–	–	–
Mars Hill College	–	–	–	20	–	–	–	52	–	–
Mitchell College	–	–	–	51	–	–	–	–	–	–
Montreat College*	–	–	–	50	–	–	–	–	–	–
Oak Ridge Military Institute	–	–	–	42	–	–	–	–	–	–
Peace Junior College	–	–	–	–	–	–	–	83	–	–
Presbyterian Junior College	–	–	–	20	–	–	–	–	–	0
Sacred Heart Junior College	15	–	–	5	–	–	–	12	–	–
St. Genevieve-of-the-Pines Junior College	–	–	–	–	–	–	–	14	–	–
Wingate Junior College	+	+	–	+	–	–	–	+	+	–
SOUTH CAROLINA[18]										
Anderson College	9	–	–	68	–	–	–	0	–	–
Avery Institute	–	–	–	–	–	–	–	–	–	–
Friendship Junior College*	12	2	–	–	–	–	–	–	–	–
North Greenville Baptist Junior College	–	–	–	–	–	–	–	–	–	–

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[15] Terminal curricula are also offered by Cumberland College, Lindsey Wilson Junior College, and Mount St. Joseph Junior College. See supplementary lists, pages 230–35.

[16] Terminal curricula are also offered by All Saints' Episcopal College and Southern Christian Institute. See supplementary lists, pages 230–35.

[17] Terminal curricula are also offered by Barber-Scotia Junior College, Belmont Abbey College, Biltmore College, Louisburg College, and Pfeiffer Junior College. See supplementary lists, pages 230–35.

[18] Terminal curricula are also offered by Coulter Memorial Junior College. See supplementary lists, pages 230–35.

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	1	–	–	–	–	28	–	–	–	–	–	33	–	–
–	–	–	–	–	–	–	15	–	–	–	–	–	–	–	6	–	–	89	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	102	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	276	–	–
–	–	–	–	–	–	2	2	–	–	–	–	–	–	–	3	–	3	4	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	294	–	–
–	–	–	–	–	–	–	1	–	–	–	–	3	–	–	–	–	–	26	–	–
–	–	–	–	–	–	0	3	–	–	–	0	0	–	0	–	–	–	12	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	76	–	–
–	–	–	–	–	–	4	7	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	0	20	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	5	6	–	10	–	–	5	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	9	–	–	–	–	–	73	–	–
–	–	–	–	–	–	–	–	–	–	–	2	3	–	–	–	–	–	20	–	–
–	–	–	–	–	–	–	+	–	–	–	–	–	–	–	–	–	–	+	–	–
–	–	–	–	–	–	–	13	–	–	–	–	0	0	0	0	–	–	0	–	–
–	–	–	+	–	–	–	+	–	–	–	–	+	–	–	+	–	+	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	63	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10	–	–
–	–	–	–	1	–	–	1	–	–	–	–	5	2	–	–	–	–	–	–	–
–	–	–	–	–	–	–	6	–	–	–	5	–	6	–	–	–	–	15	–	–
–	–	–	–	–	–	–	+	–	–	–	–	–	+	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	52	–	–
–	–	–	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	12	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	8	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	17	5	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	56	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	10	5	–	–	–	3	10	–	3	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	+	–	–	–	–	+	–	–	+	+	–	+	–	–
–	–	–	–	–	–	1	7	–	–	–	–	0	–	–	–	–	–	6	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	97	–	–
–	–	–	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	33	–	–
–	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–	–	13	–	–

Table XXVIII.—*Continued.*

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
Southern (continued)										
TENNESSEE[19]										
David Lipscomb College	4	–	–	–	–	–	–	–	–	–
Freed-Hardeman College†	–	–	–	24	–	–	–	5	–	–
Hiwassee College	0	–	–	5	–	–	–	–	0	–
Morristown Normal & Industrial Junior College	–	+	–	+	–	–	–	+	–	–
Swift Memorial Junior College	0	–	–	0	–	–	–	0	–	–
Tennessee, Junior College of University of*†	–	127	–	–	–	–	–	–	–	–
Tennessee Wesleyan College	53	–	–	53	–	–	–	–	–	–
Trevecca Nazarene College†	29	–	–	–	–	–	–	3	–	–
Ward-Belmont School*	43	–	–	–	–	–	–	8	–	–
TEXAS[20]										
Amarillo College*	40	–	–	29	–	–	7	26	–	–
Brownsville Junior College	10	–	–	–	–	–	–	8	–	10
Clarendon Junior College	–	3	–	–	–	–	–	7	–	–
Corpus Christi Junior College*	14	–	–	14	–	–	–	7	7	–
Decatur Baptist College*	–	–	–	–	–	–	–	3	–	1
Edinburg Junior College*	15	–	–	15	–	–	–	–	–	–
Hardin Junior College*	4	–	–	2	–	–	0	1	–	–
Hillsboro Junior College	–	–	–	–	–	–	–	10	–	4
Hockaday Junior College	–	–	–	–	–	–	–	–	–	–
John Tarleton Agricultural College*	–	215	–	–	–	–	–	–	–	–
Kilgore College*	–	–	–	102	–	–	–	–	–	–
Lamar College*	26	–	–	10	–	–	15	15	10	–
Mary Allen Junior College*	–	–	–	–	–	–	–	–	–	–
North Texas Junior Agricultural College*	0	–	–	0	–	–	–	–	–	55
Our Lady of Victory College	–	–	–	–	–	–	–	10	–	–
Paris Junior College*	+	–	–	+	–	–	–	+	–	–
Ranger Junior College*†	0	–	–	0	–	0	0	20	–	–
St. Philip's Junior College*	–	–	–	–	–	–	–	–	–	–
San Angelo College*	0	–	–	–	–	–	–	22	–	–
San Antonio Junior College*	+	–	–	+	–	–	–	–	+	–
Schreiner Institute*	–	–	–	12	–	–	–	8	–	–
Tyler Junior College*	88	–	–	–	–	–	–	15	–	–
Weatherford College	–	–	–	–	–	–	–	12	–	1
Westminster College*	–	–	–	–	–	–	–	–	–	–
VIRGINIA										
Arlington Hall Junior College*	39	–	–	34	–	–	–	–	–	–
Averett College	14	–	–	35	–	–	–	57	–	–
Bluefield College	100	–	–	35	–	–	–	15	10	–
Eastern Mennonite School*	–	–	–	–	–	–	–	–	–	–
Fairfax Hall Junior College	19	–	–	–	–	–	–	19	–	–
Marion College†	–	–	–	18	–	–	–	3	–	–
Shenandoah College	7	–	–	6	–	–	–	10	–	–
Southern Seminary and Junior College*	27	–	–	16	–	–	–	–	–	–
Stratford Junior College	12	–	–	–	–	–	–	14	–	–
Sullins College	–	–	–	–	–	–	–	46	–	–
Virginia Intermont College	42	–	–	–	–	–	–	85	–	–

---

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29.

[19] Terminal curricula are also offered by Southern Junior College. See supplementary lists, pages 230–35.

[20] Terminal curricula are also offered by Blinn College, Clifton Junior College, Gainesville Junior College, Lee Junior College, College of Marshall, Texas Lutheran College, Texarkana College, Texas Military College, Temple Junior College, Victoria Junior College, and Wayland Baptist College. See supplementary lists, pages 230–35.

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	3	1	–	3	–	1	6	1	–	–	–	130	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	72	–	–
–	–	–	–	–	–	–	+	–	–	–	+	–	–	–	–	+	–	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	41	–	–
–	–	–	–	–	–	–	–	–	–	–	–	96	–	–	–	–	–	20	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	81	–	–
–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	32	–	–
–	–	–	–	–	–	4	18	–	6	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	10	21	–	–	–	40	–	–	–	–	–	–	9	–	–
–	–	10	10	–	2	3	–	–	–	–	–	–	3	4	3	–	2	10	–	–
–	–	–	–	–	–	–	–	–	–	–	2	1	–	–	–	–	–	10	–	–
–	–	–	–	–	–	–	–	–	–	–	16	–	–	–	–	–	3	7	–	–
–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8	–	–
–	–	–	–	–	–	2	2	–	–	0	–	0	–	–	0	–	–	0	–	–
–	–	–	–	–	–	2	–	–	–	–	–	–	2	–	10	–	–	10	–	–
–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	3	–	–	–	–
–	–	–	–	–	11	–	25	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	24	2	–	–	–	1	20	–	5	3	15	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	30	–	–
–	–	25	16	–	–	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	2	4	–	–	–	–	–	5	–	–	–	–	16	–	–
–	–	–	–	–	–	–	+	–	–	+	+	+	+	–	+	+	+	+	–	–
–	–	–	–	–	–	–	0	–	–	0	0	–	–	–	0	0	–	0	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	47	–	–
–	–	–	–	–	–	–	5	–	–	–	0	0	–	–	–	–	–	17	–	–
–	+	+	+	–	–	–	–	–	–	–	–	–	+	–	–	–	–	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	1	–	–	–	–	2	–	–	–	–	–	–	15	–	–
–	–	–	–	–	1	1	–	–	–	–	–	–	7	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	2	–	–	13	–	–
–	–	–	–	–	–	7	6	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	6	41	–	–	–	–	1	–	–	–	–	–	10	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9	–	18
–	–	–	–	–	–	2	18	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	3	–	–	–	–	3	–	–	–	–	–	29	–	–
–	–	–	–	–	–	–	16	–	–	–	–	–	–	–	–	–	–	7	–	–
–	–	–	–	–	–	8	2	–	1	–	6	8	–	–	4	–	–	–	–	–
–	–	–	–	–	–	3	0	–	1	1	–	–	2	–	–	–	–	1	–	–
–	–	–	–	–	–	56	16	–	–	–	–	20	–	–	11	–	–	–	–	–
–	–	–	–	–	–	20	60	–	16	–	–	30	–	11	–	–	–	–	–	–

Table XXVIII.—*Continued.*

Institution	*General Cultural*	*Agriculture, General*	*Forestry*	*Business, General*	*Accounting*	*Insurance*	*Salesmanship*	*Secretarial*	*Engineering, General*	*Aviation*
Northwest										
IDAHO										
Boise Junior College*	–	–	–	–	–	–	–	–	–	–
Idaho, Southern Branch of University of*†	–	–	–	1	–	–	–	–	–	–
MONTANA										
Northern Montana College*	–	–	–	66	–	–	–	–	–	–
OREGON[21]										
St. Helen's Hall Junior College*	–	–	–	–	–	–	–	–	–	–
UTAH										
Carbon College*†	–	–	–	10	–	–	–	–	17	–
Dixie Junior College*	+	+	–	–	–	–	–	+	–	–
Snow College*†	–	–	–	10	–	–	–	20	–	–
Weber College*†	–	–	–	34	–	–	9	135	–	–
WASHINGTON[22]										
Centralia Junior College*	–	–	–	–	–	–	–	–	–	–
Grays Harbor Junior College†	–	–	–	–	–	–	–	8	–	–
Lower Columbia Junior College*	13	–	–	0	–	–	–	2	–	–
Spokane Junior College*	10	–	–	–	–	–	–	–	–	–
Yakima Valley Junior College	–	–	–	4	–	–	–	–	–	–
Western										
CALIFORNIA[23]										
Antelope Valley Junior College*†	23	1	–	4	–	–	–	20	–	2
Bakersfield Junior College†	51	12	5	61	–	–	–	115	–	22
Central Junior College*	–	1	–	32	2	–	–	26	–	–
Chaffey Junior College†	–	23	23	50	–	–	–	78	3	101
Citrus Junior College	44	2	5	12	–	2	10	15	–	23
Coalinga Extension Center*†	–	–	–	31	–	–	–	–	–	–
Compton Junior College†	137	0	36	34	–	0	11	190	81	39
Fresno Junior College*	–	5	–	29	–	–	–	11	14	–
Fullerton Junior College*†	70	22	14	183	50	–	0	126	77	58
Glendale Junior College*†	75	5	14	100	–	4	12	100	10	40
La Sierra College	–	–	–	14	–	–	–	31	–	–
Lassen Junior College*	–	6	64	38	–	–	–	–	–	–
Long Beach Junior College*†	142	10	5	90	–	5	60	145	101	–
Los Angeles City College†	300	–	–	176	149	–	–	436	312	28
Lux Technical Institute	–	–	–	–	–	–	15	–	–	–
Marymount College*	11	–	–	4	–	–	–	–	–	–
Menlo Junior College	–	2	–	6	–	–	–	–	–	–
Modesto Junior College*†	–	35	3	–	–	–	75	174	61	120
Oceanside-Carlsbad Junior College*	25	4	–	20	–	–	–	–	15	–
Pasadena Junior College*†	770	2	70	313	–	2	44	151	–	165
Placer Junior College*†	1	26	1	93	–	–	1	11	9	–
Pomona Junior College*	52	–	–	80	–	–	–	10	–	48
Porterville Junior College*	–	18	5	30	–	–	–	15	–	–
Reedley Junior College*	+	+	–	+	–	–	–	+	–	–
Riverside Junior College†	–	3	–	4	–	–	–	4	–	12
Sacramento Junior College*†	187	–	56	292	–	–	25	234	–	234
Salinas Junior College†	18	35	10	109	–	–	32	126	32	10
San Benito County Junior College†	22	0	0	10	–	–	–	9	0	1
San Bernardino Valley Junior College*	205	–	–	276	–	–	–	–	–	–
San Francisco Junior College*†	46	1	–	155	–	28	28	100	–	–
San Mateo Junior College†	41	6	22	132	20	1	5	100	5	2
Santa Ana Junior College†	203	–	–	87	35	–	–	164	43	23
Santa Maria Junior College†	–	–	–	19	20	–	–	29	10	–
Santa Monica Junior College*	73	2	–	35	–	–	–	80	–	–
Santa Rosa Junior College*	64	7	–	141	–	–	–	–	–	–
Stockton Junior College*†	24	8	6	32	–	–	0	6	9	4
Taft Junior College†	33	–	4	42	–	–	9	51	–	3
Ventura Junior College*	96	39	4	94	5	–	–	–	63	12
Visalia Junior College*	150	10	–	150	–	–	–	–	30	–
Williams Junior College	+	–	–	–	–	–	–	–	–	–
Yuba County Junior College	66	7	2	106	–	–	1	–	–	9

* Curricula added since 1938–39. See supplementary lists, pages 230–35.

† Other curricula offered in 1938–39 are listed in the supplement to this table, pages 226–29

[21] [illegible] by Multnom h Coll [illegible]

Table XXVIII.—*Continued.*

Chemical Engineering	*Civil Engineering*	*Electrical Engineering*	*Mechanical Engineering*	*Radio Engineering*	*Architecture*	*Art*	*Music*	*Photography*	*Speech and Dramatics*	*Medical-Secretarial*	*Nursing*	*Home Economics*	*Journalism*	*Librarianship*	*Physical Education*	*Recreational Leadership*	*Social Service*	*Teaching*	*Mortuary Science*	*Religious Education*
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	30	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	127	–	–
–	–	–	–	–	–	11	–	–	6	–	83	0	5	–	–	–	–	–	–	–
–	–	–	–	–	–	2	–	–	–	–	–	3	–	–	–	–	–	–	–	–
–	–	–	–	–	–	+	+	–	–	–	–	+	–	–	+	+	–	+	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	51	4	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	1	–	–	–	4	–	–	–	2	–	–	–	–	–
–	–	–	4	–	–	5	2	–	–	–	–	–	3	1	–	–	–	–	–	–
–	–	–	–	–	–	–	4	–	–	–	4	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	2	1	1	–	–	–	2	1	1	2	2	–	–	–	–	–
–	–	17	16	–	9	19	13	–	–	–	23	–	12	–	–	–	–	–	–	–
–	–	–	2	2	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
24	2	1	11	4	2	16	27	1	–	1	–	7	23	9	12	–	10	–	2	–
–	–	–	7	–	–	45	5	–	–	3	8	6	3	2	7	2	3	6	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	21	13	15	–	15	36	25	–	7	2	23	22	24	10	22	5	19	0	–	–
–	–	–	–	–	2	3	4	–	–	–	–	–	–	–	2	–	–	–	–	–
–	–	4	22	–	4	35	28	1	–	3	–	30	17	3	29	–	–	–	4	–
–	3	6	3	–	–	40	16	8	–	6	–	10	10	5	–	2	14	–	–	–
–	–	–	–	–	–	–	1	–	–	–	–	1	–	–	–	–	–	33	–	–
–	–	–	–	–	–	–	–	–	–	–	–	6	–	–	3	–	–	–	–	–
–	40	20	41	–	30	91	50	–	–	15	37	7	50	–	13	10	–	–	–	–
–	–	7	–	23	19	169	138	20	170	–	172	27	116	55	–	67	–	–	–	–
–	–	–	–	–	–	16	–	–	–	59	–	24	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	3	5	31	–	–	–	–	74	15	2	20	–	–	–	–	–
–	–	–	–	–	–	–	10	–	–	–	4	10	–	1	8	–	1	4	–	–
–	9	44	59	24	22	105	65	13	–	29	–	87	107	8	–	11	20	150	–	–
–	–	–	2	–	–	4	11	6	–	–	–	7	8	1	3	–	–	–	–	–
–	–	–	–	–	–	0	–	–	–	–	11	–	–	–	–	–	–	–	–	–
–	–	–	20	–	–	20	10	–	–	–	12	40	3	1	–	2	–	10	–	–
–	–	–	–	–	–	–	+	–	–	–	–	+	+	–	–	–	–	+	–	–
–	–	–	–	–	2	–	3	–	–	–	10	–	–	1	1	–	–	2	–	–
–	–	–	–	–	22	122	110	–	–	–	47	20	58	12	63	–	–	–	–	–
–	–	–	–	–	2	40	20	–	–	–	–	27	7	6	9	20	8	–	6	–
–	0	0	0	–	–	1	0	–	–	–	0	1	0	0	0	0	0	0	–	–
–	–	18	–	–	–	0	6	–	–	–	–	–	4	3	0	–	–	–	–	–
–	–	–	–	28	–	8	2	–	–	–	53	2	–	–	–	5	–	–	13	–
6	1	7	23	7	9	34	19	1	–	–	6	2	14	3	1	3	–	2	4	–
–	11	5	29	–	–	40	41	–	–	–	–	–	9	–	–	–	–	–	–	–
–	–	9	–	–	–	11	6	–	–	–	–	–	1	–	–	–	–	–	–	–
–	–	–	–	–	7	17	5	–	–	–	32	–	11	–	–	–	–	–	–	–
–	–	–	–	–	–	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	4	3	8	1	12	0	2	–	–	7	7	9	4	0	–	1	–	3	–
–	–	–	–	–	2	7	2	–	–	–	10	1	2	2	2	–	–	–	–	–
–	–	–	–	–	–	4	8	–	–	–	–	14	9	–	–	–	–	–	–	–
–	–	–	–	–	15	5	5	–	–	–	–	5	10	5	–	–	–	–	–	–
–	–	–	–	–	–	+	–	–	–	–	–	–	+	–	–	–	–	–	–	–
–	–	–	3	–	3	–	13	–	–	1	14	2	4	3	2	–	3	–	2	–

Table XXVIII (Supplement). TERMINAL CURRICULA OFFERED
(This supplement includes curricula which were not offered frequently

Institution	*Floriculture*	*Banking and Finance*	*Business Law*	*Hotel and Restaurant Management*	*Management*	*Merchandising*	*Agricultural Engineering*	*Air Conditioning*	*Auto Mechanics*	*Building Trades*
New England										
CONNECTICUT										
Larson Junior College	–	–	–	–	–	2	–	–	–	–
Physical Therapy, Junior College of	–	–	–	–	–	–	–	–	–	–
MASSACHUSETTS										
Chamberlayne Junior College	–	–	–	–	–	–	–	–	–	–
Lasell Junior College	–	–	–	–	–	76	–	–	–	–
Middle States										
DISTRICT OF COLUMBIA										
Georgetown Visitation Junior College	–	–	–	–	–	–	–	–	–	–
Mount Vernon Seminary	–	–	–	–	–	–	–	–	–	–
NEW YORK										
Briarcliff Junior College	–	–	–	–	–	–	–	–	–	–
Finch Junior College	–	–	–	–	–	–	–	–	–	–
PENNSYLVANIA										
Scranton-Keystone Junior College	–	–	–	–	–	–	–	–	–	–
North Central										
ARKANSAS										
Fort Smith Junior College	–	–	–	–	–	–	–	–	–	1
ILLINOIS										
Herzl Junior College	–	1	–	–	–	–	–	–	–	–
Woodrow Wilson Junior College	–	10	–	–	–	25	–	–	–	–
Wright Junior College	–	3	–	–	–	14	–	–	–	–
IOWA										
Elkader Junior College	–	–	–	–	–	–	–	–	–	–
Graceland College	–	–	–	–	–	–	–	–	–	–
KANSAS										
Arkansas City Junior College	–	–	–	–	–	–	–	–	–	–
El Dorado Junior College	–	–	–	–	–	–	–	–	–	–
St. John's Lutheran College	–	–	–	–	–	–	–	–	–	–
MICHIGAN										
Flint Junior College	–	–	–	–	–	–	–	–	–	–
MINNESOTA										
Duluth Junior College	–	–	–	–	–	–	–	–	–	–
Itasca Junior College	–	–	–	–	–	–	–	0	–	–
Rochester Junior College	–	–	–	–	–	–	–	–	–	–
Virginia Junior College	–	–	–	–	–	–	–	–	–	–
MISSOURI										
Joplin Junior College	–	–	–	–	–	–	–	–	1	2
Southwest Baptist College	–	–	–	–	–	–	–	–	–	–
NEBRASKA										
McCook Junior College	–	–	–	–	–	–	–	–	–	–
NORTH DAKOTA										
North Dakota School of Forestry	21	–	–	–	–	–	–	–	–	–
WEST VIRGINIA										
Potomac State School	–	–	–	–	–	–	–	–	–	–
Southern										
GEORGIA										
West Georgia College	–	–	–	–	–	–	–	–	–	–
MISSISSIPPI										
Gulf Park College	–	–	–	–	–	–	–	–	–	–
TENNESSEE										
Freed-Hardeman College	–	–	–	–	–	–	–	–	–	–
University of Tennessee Junior College	–	–	–	–	–	–	34	–	–	–
Trevecca Nazarene College	–	–	–	–	–	–	–	–	–	–
TEXAS										
Ranger Junior College	–	–	–	1	–	–	–	–	–	–
VIRGINIA										
Marion College	–	–	–	–	–	–	–	–	–	–

BY JUNIOR COLLEGES AND ENROLLMENTS IN THEM, 1938–39
enough to warrant inclusion in the main section of Table XXVIII.)

Drafting	*Geology*	*Mining*	*Navigation*	*Oil Technology*	*Welding*	*Fashion Illustration and Costume Design*	*Interior Decoration*	*Civic Health*	*Laboratory Technology*	*Physical Therapy*	*Civil Service*	*Military Service*	*Police Officers*	*Cosmetology*	*Parish Secretary*	*Printing*	*Specials, Unclassified*
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	23
–	–	–	–	–	–	–	–	–	26	14	–	–	–	–	–	–	–
–	–	–	–	–	–	14	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
–	–	–	–	–	–	7	10	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	10	19	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	8
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–
–	–	–	–	7	–	–	–	–	–	–	–	–	–	1	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	22	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	6	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	27
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	76
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	56
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2

Table XXVIII (Supplement).—*Continued.*

Institution	*Floriculture*	*Banking and Finance*	*Business Law*	*Hotel and Restaurant Management*	*Management*	*Merchandising*	*Agricultural Engineering*	*Air Conditioning*	*Auto Mechanics*	*Building Trades*
IDAHO										
Idaho, Southern Branch of University of	–	–	–	–	–	–	–	–	–	–
UTAH										
Carbon College	–	–	–	–	–	–	–	–	24	12
Snow College	–	–	–	–	–	–	–	–	–	–
Weber College	–	–	–	–	–	–	–	–	–	81
WASHINGTON										
Grays Harbor Junior College	–	–	–	–	–	–	–	–	–	–
Western										
CALIFORNIA										
Antelope Valley Junior College	–	–	–	–	–	–	–	–	–	–
Bakersfield Junior College	–	–	–	–	–	–	–	–	–	–
Chaffey Junior College	–	–	–	–	–	–	–	–	–	–
Coalinga Extension Center	–	–	–	–	–	–	–	–	–	–
Compton Junior College	1	–	–	0	–	–	–	–	–	–
Fullerton Junior College	–	–	–	–	–	14	–	–	–	–
Glendale Junior College	–	–	–	4	–	–	–	–	–	–
Long Beach Junior College	1	–	–	–	–	–	–	–	–	–
Los Angeles City College	–	28	20	–	42	111	–	–	–	–
Modesto Junior College	–	–	–	–	–	–	25	–	27	30
Pasadena Junior College	5	–	–	–	–	–	–	–	5	–
Placer Junior College	–	–	–	–	–	–	–	–	–	6
Riverside Junior College	–	–	–	–	–	–	–	–	–	–
Sacramento Junior College	–	–	–	–	–	–	–	–	–	–
Salinas Junior College	2	–	–	–	–	–	–	–	–	–
San Benito County Junior College	–	–	–	–	–	–	–	–	–	–
San Francisco Junior College	7	–	–	48	–	–	–	–	–	–
San Mateo Junior College	1	–	–	–	–	–	–	10	–	–
Santa Ana Junior College	–	–	–	–	–	48	–	–	–	–
Santa Maria Junior College	–	–	–	–	–	–	–	–	8	7
Stockton Junior College	–	–	–	–	–	–	–	–	–	–
Taft Junior College	–	–	–	–	–	–	–	–	2	3

Table XXVIII (Supplement).—*Continued.*

Drafting	*Geology*	*Mining*	*Navigation*	*Oil Technology*	*Welding*	*Fashion Illustration and Costume Design*	*Interior Decoration*	*Civic Health*	*Laboratory Technology*	*Physical Therapy*	*Civil Service*	*Military Service*	*Police Officers*	*Cosmetology*	*Parish Secretary*	*Printing*	*Specials, Unclassified*
–	–	–	–	–	–	–	–	–	11	–	–	–	–	–	–	–	264
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10
–	–	–	–	27	–	–	–	–	–	–	–	–	–	–	–	–	55
–	–	–	2	–	–	–	–	–	–	–	–	1	1	–	–	–	–
–	–	–	–	39	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	5	5	–	–	–	–
20	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–
–	–	–	–	–	–	–	–	108	–	–	–	–	98	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5	–
–	–	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	147
–	–	2	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–
–	–	–	5	–	–	–	–	–	–	–	7	–	–	–	–	–	–
–	–	–	–	2	–	–	1	–	1	–	1	3	2	–	–	–	18
7	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13	–
3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	1	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–
–	–	–	–	34	30	–	–	–	–	–	–	–	–	–	–	–	–

Lists Supplementary to Table XXVIII

Names of institutions offering terminal curricula for which information was not available until after Table XXVIII was prepared. For fuller explanation see pages 63-68.

GENERAL CULTURAL

Eastern Mennonite School
Larson Junior College
Montreat College
Mount St. Joseph Junior College
Pfeiffer Junior College
Sapulpa Junior College
Stephens College
Texarkana College
Whitworth College

AGRICULTURE

General

Bethune-Cookman College
Brawley Junior College
Carnegie Junior College
Gila Junior College
Lindsey Wilson Junior College
Louisburg College
Mary Allen Junior College
Murray State School of Agric.
Paris Junior College
Phoenix Junior College
Pomona Junior College
Pueblo County Junior College
Reinhardt College
Snead Junior College

Floriculture

Modesto Junior College

Forestry

Boise Junior College
Grand Rapids Junior College

BUSINESS

General

Altus Junior College
Armstrong Jr. College (Calif.)
Bacone College
Blinn College
Boise Junior College
Connecticut, Junior College of
Ellsworth Junior College
Georgia Military College
Gordon Military College
Highland Park Junior College
Joplin Junior College
Kansas City Jr. College (Kansas)
Mesa County Junior College
Pfeiffer Junior College
St. Petersburg Junior College
St. Philip's Junior College
South Jersey, College of
Southern Junior College
Victoria Junior College
Worcester Junior College
Young L. G. Harris College

Accounting

Armstrong Jr. College (California)
Grand Rapids Junior College
Hillyer Junior College
Holmes Junior College
Kansas City, Jr. College of (Mo.)
Modesto Junior College
Ranger Junior College
Santa Monica Junior College
Santa Rosa Junior College
Southeastern Colorado, Jr. Coll. of
Spring Arbor Junior College
Stockton Junior College
Temple Junior College
Tyler Junior College
Victoria Junior College
Worcester Junior College

Banking and Finance

Grand Rapids Junior College
Stockton Junior College

Hotel and Restaurant Management

Scranton-Keystone Junior College

Merchandising

Armstrong Jr. College (California)
Central Junior College
Colorado Woman's College
Connecticut, Junior College of
Duluth Junior College
Duncan Junior College
Grand Rapids Junior College
Herzl Junior College
Modesto Junior College
Morton Junior College
North Texas Jr. Agric. Coll.
Paris Junior College
Placer Junior College
Sacramento Junior College
San Francisco Junior College
Santa Rosa Junior College
Scranton-Keystone Junior College
Southern Seminary and Jr. College
Stockton Junior College
Ventura Junior College
Worcester Junior College

Salesmanship

St. Petersburg Junior College
Santa Monica Junior College
Waldorf College

Secretarial

Armstrong Jr. College (California)
Augusta, Junior College of
Barber-Scotia Junior College
Beulah College
Brainerd Junior College
Campbell College
Chowan Junior College
Concordia Collegiate Institute
Cumberland College
Dowling College
Eagle Grove Junior College
Eastern Oklahoma A. & M. Coll.
Elkader Junior College
Eveleth Junior College
Flat River, Junior College of
Gainesville Junior College
Georgia Southwestern College
Kansas City, Jr. College of (Mo.)
Marymount College
Mount St. Clare Junior College
Mount St. Joseph Junior College
Mount Vernon Junior College
Mount Vernon Seminary
Muskogee Junior College
Paola, College of
Rio Grande College
Rochester Junior College
St. Helen's Hall Junior College
St. Petersburg Junior College
Santa Rosa Junior College
Sayre Junior College
Southeastern Colorado, Jr. Coll. of
Spring Arbor Junior College
Thornton Junior College
Tipton Junior College
Victoria Junior College
Visalia Junior College
Waukon Junior College

ENGINEERING AND TECHNOLOGY

General

Brawley Junior College
Canal Zone Junior College
Columbia Junior College
Ely Junior College
Joplin Junior College
Muskogee Junior College
Northeastern Oklahoma Jr. College
Phoenix Junior College
Ranger Junior College
Sacramento Junior College
San Bernardino Valley Jr. College
Tipton Junior College
Virginia Junior College
Waldorf College

Auto Mechanics

Alliance College
Dixie Junior College
Glendale Junior College
Reedley Junior College
Ventura Junior College

*Aviation**

Abraham Baldwin Agric. Coll.
Albert Lea Junior College
Altus Junior College
Amarillo College
Arkansas City Junior College
Arkansas Polytechnic College
Arkansas State A. and M. Coll.
Armstrong Jr. College (Georgia)
Augusta, Junior College of
*Austin Junior College
Baltimore, Jr. Coll. of Univ. of
Bay City Junior College
*Beckley College
Belmont Abbey College
Biltmore College
*Bismarck Junior College
Blinn College
Boise Junior College
Brevard College
Bucknell University Jr. College
Burlington Junior College
Cameron State Agricultural College
Centerville Junior College
Central Junior College
Centralia Junior College
Chanute Junior College
*Cisco Junior College
Clark Junior College
Clifton Junior College
Coalinga Extension Center, Fresno State College
Coffeyville Junior College
Concordia College (Minnesota)
Connecticut, Junior College of
Connors State Agricultural Coll.
Corpus Christi Junior College
*Custer County Junior College
Dixie Junior College
Dodge City Junior College
Dowling College
East Central Junior College
*Eastern New Mexico College
Eastern Okla. A. and M. Coll.
Edinburg Junior College
Ellsworth Junior College
Ely Junior College
Estherville Junior College
Eveleth Junior College
*Ferris Institute Junior College
Flint Junior College
Fordson Junior College
Fort Dodge Junior College
*Fort Scott Junior College
Fort Smith Junior College
Fresno Junior College
Gainesville Junior College
Garden City Junior College
*Gary College
Georgia Military College
Georgia Southwestern College
*Giffin College
Gila Junior College
Gogebic Junior College
Gordon Military College
Grand Rapids Junior College
Green Mountain Junior College
Hardin Junior College
Hebron College
Herzl Junior College
Hibbing Junior College
Highland Park Junior College
*Hinds Junior College
Hutchinson Junior College
Idaho, Southern Branch of Univ. of
Independence Jr. Coll. (Kansas)
Itasca Junior College
Jackson Junior College
Jefferson City Junior College
*John McNeese Junior College
John Tarleton Agricultural Coll.
Jones County Junior College
Joplin Junior College
Kansas City Junior College (Kan.)

---

* Information for all but five of the institutions included in this list was taken from Walter C. Eells' article, "The Civilian Pilot Training Program" (*Junior College Journal*, 11: 125-30, November 1940). The article includes a few junior colleges other than the 443 for which information on all curricula is available. These have been included in the list and indicated with an asterisk, but they have not been included in the main section of Table XXVIII.

Kansas City, Jr. Coll. of (Mo.)
Kemper Military School
Kilgore College
Kiowa County Junior College
Lamar College
La Salle-Peru-Oglesby Jr. Coll.
Lassen Junior College
Lee Junior College
Little Rock Junior College
*Lon Morris College
Long Beach Junior College
Lower Columbia Junior College
Lyons Township Junior College
*Maine Township Junior College
*Mangum Junior College
Marshall, College of
Marshalltown Junior College
*Mason City Junior College
Meridian Junior College
Mesa County Junior College
Middle Georgia College
Moberly Junior College
Monett Junior College
*Morris Junior College
Mount Vernon Junior College
Multnomah College
Murray State School of Agric.
Muscatine Junior College
Muskegon Junior College
New Mexico Military Institute
Nichols Junior College
*Norfolk Division, College of William and Mary
*North Idaho Junior College
Northeast Junior College
Northern Montana College
Oceanside-Carlsbad Junior College
*Oklahoma Military Academy
Okmulgee Junior College
Palm Beach Junior College
Paris Junior College
*Parsons Junior College
Pearl River Junior College
Placer Junior College
Port Huron Junior College
Porterville Junior College
Pratt Junior College
Pueblo County Junior College
Ranger Junior College
Red Oak Junior College
Reedley Junior College
*Ringling Junior College
Rio Grande College
Rochester Junior College
St. Joseph Junior College
St. Joseph's College
St. Petersburg Junior College
San Angelo College
San Antonio Junior College
San Bernardino Valley Jr. Coll.
*San Diego Junior College
San Francisco Junior College
*San Luis Obispo Junior College
Santa Monica Junior College
Santa Rosa Junior College
Sapulpa Junior College
Schreiner Institute
Scottsbluff Junior College
Scranton-Keystone Junior College
Sheldon Junior College
Snow College
Spokane Junior College
Springfield Junior College
Sunflower Junior College
Temple Junior College
Tennessee, Jr. Coll. of Univ. of
Texarkana College
Texas Lutheran College
Thornton Junior College
*Trinidad Junior College
Tyler Junior College
University Junior College
*Utah, Branch Agricultural Coll. of
Victoria Junior College
Vincennes University Jr. Coll.
Virginia Junior College
Visalia Junior College
Waldorf College
Washington Junior College
Wayland Baptist College
Weber College
*Wenatchee Junior College
Wentworth Military Academy
Westminster College (Texas)
*Wetumka Junior College
Williamsport Dickinson Seminary

Wisconsin, Ext. Div. of Univ. of
Woodrow Wilson Junior College
Woodward Junior College
Worthington Junior College
Wright Junior College
Yakima Valley Junior College

Building Trades

Boise Junior College
Dixie Junior College
Lassen Junior College
Pasadena Junior College
Porterville Junior College
Reedley Junior College

Drafting

Alliance College
Connecticut, Junior College of
Dixie Junior College
Gogebic Junior College
Herzl Junior College
Muskogee Junior College
Northern Montana College
San Francisco Junior College
Stockton Junior College
Wright Junior College

Electrical Engineering

Alliance College
Modesto Junior College
San Francisco Junior College
Ventura Junior College

Mechanical Engineering

Alliance College
Coffeyville Junior College
Eveleth Junior College
Pomona Junior College
San Francisco Junior College

Oil Technology

Kilgore College
Ventura Junior College

Radio Engineering

Boise Junior College
Kilgore College
Modesto Junior College
Spokane Junior College

Welding

Carbon College
Chanute Junior College
Glendale Junior College
Joplin Junior College
Pasadena Junior College

FINE ARTS

Architecture

San Francisco Junior College

Art

Oceanside-Carlsbad Junior College
Paola, College of
Weber College

Fashion Illustration and Costume Design

Colorado Woman's College
Larson Junior College
Lasell Junior College
Penn Hall Junior College

Interior Decoration

Grand Rapids Junior College
Penn Hall Junior College
Spokane Junior College

Music

Campbell College
Georgetown Visitation Jr. Coll.
Los Angeles Pacific College
Rio Grande College

Photography

Antelope Valley Junior College
Chanute Junior College
Kilgore College
Modesto Junior College
Okmulgee Junior College
Ventura Junior College

Speech and Dramatics

Pasadena Junior College
Santa Monica Junior College
Stockton Junior College
Texarkana Junior College

HEALTH SERVICES

Laboratory Technology

Larson Junior College

Medical-Secretarial

Augusta, Junior College of
Cazenovia Seminary
Fordson Junior College
Friendship Junior College
Graceland College
Grand Rapids Junior College
Joplin Junior College
Morton Junior College
Mount St. Agnes Junior College
Thornton Junior College
Waldorf College

HOME ECONOMICS

Arlington Hall Junior College
Bethune-Cookman College
Beulah College
Boise Junior College
Brawley Junior College
Campbell College
Cazenovia Seminary
Chamberlayne Junior College
Christian College
Columbia Junior College
Corpus Christi Junior College
Cumberland College
Dodd College
Eveleth Junior College
Flat River, Junior College of
Fresno Junior College
Georgetown Visitation Jr. Coll.
Hutchinson Junior College
Marymount College
Mesa County Junior College
Paola, College of
Reinhardt College
St. Philip's Junior College
Santa Rosa Junior College
Seminole Junior College
Temple Junior College
Ward-Belmont School
Westbrook Junior College
Whitworth College
Wood Junior College

PUBLIC SERVICE

Physical Education

Wood Junior College

Police Officers

Sacramento Junior College
San Francisco Junior College

Recreational Leadership

St. Mary's Female Sem.—Jr Coll.

Teaching

All Saints' Episcopal College
Beulah College
Blinn College
Coulter Memorial Junior College
Decatur Baptist College
Gainesville Junior College
Grand View College
Hesston College
Iola Junior College
Los Angeles Pacific College
Mount St. Joseph Junior College
Muscatine Junior College
Norman Junior College
Notre Dame Jr. Coll., St. Louis Un.
Reinhardt College
Rio Grande College
St. Helen's Hall Junior College
Southern Christian Institute
Southern Junior College
Southern Seminary and Jr. Coll.
Texas Military College
Victoria Junior College
Washington Junior College

MISCELLANEOUS

Cosmetology

Friendship Junior College
Fullerton Junior College
Pasadena Junior College

Appendix B—Supplementary Tables

Table XXIX. NUMBER OF JUNIOR COLLEGES OFFERING TERMINAL CURRICULA AND NUMBER AND PERCENTAGE OF STUDENTS ENROLLED IN THEM, 1938–39

Public Institutions

State or Region	Institutions		Students enrolled		Per cent of students enrolled in terminal curricula
	Reporting	Offering terminal curricula	In all curricula	In terminal curricula	
Totals	**204**	**150**	**87,487**	**30,261**	**35**
New England	**0**	**—**	**—**	**—**	**—**
Connecticut	0	—	—	—	—
Maine	0	—	—	—	—
Massachusetts	0	—	—	—	—
New Hampshire	0	—	—	—	—
Vermont	0	—	—	—	—
Middle States	**6**	**1**	**893**	**81**	**9**
Canal Zone	1	0	133	0	0
Maryland	0	—	—	—	—
New Jersey	0	—	—	—	—
New York	0	—	—	—	—
Pennsylvania	5	1	760	81	11
North Central	**110**	**76**	**34,171**	**7,389**	**22**
Arizona	2	2	1,036	322	31
Arkansas	6	6	2,002	574	29
Colorado	2	2	788	126	16
Illinois	8	5	9,899	1,621	16
Indiana	1	1	151	28	19
Iowa	23	9	1,873	153	8
Kansas	11	10	3,072	1,343	44
Michigan	9	9	3,419	904	26
Minnesota	12	10	2,627	730	28
Missouri	9	8	3,258	642	19
Nebraska	2	2	292	90	31
New Mexico	1	1	288	23	8
North Dakota	2	2	656	364	55
Ohio	0	—	—	—	—
Oklahoma	20	8	3,738	298	8
South Dakota	0	—	—	—	—
West Virginia	1	1	378	171	45
Wisconsin	1	0	694	0	0
Southern	**46**	**32**	**14,395**	**4,313**	**30**
Alabama	1	1	395	395	100
Florida	1	0	96	0	0
Georgia	11	7	3,679	1,682	46
Kentucky	2	1	237	24	10
Louisiana	1	1	451	95	21
Mississippi	9	7	2,487	615	25
North Carolina	1	0	173	0	0
South Carolina	0	—	—	—	—
Tennessee	1	1	337	277	82
Texas	19	14	6,540	1,225	19
Virginia	0	—	—	—	—
Northwest	**6**	**6**	**3,044**	**918**	**30**
Idaho	2	2	1,415	306	22
Montana	1	1	375	193	51
Oregon	0	—	—	—	—
Utah	3	3	1,254	419	33
Washington	0	—	—	—	—
Western (California)	**36**	**35**	**34,984**	**17,560**	**50**

Table XXX. Number of Junior Colleges Offering Terminal Curricula and Number and Percentage of Students Enrolled in Them, 1938–39

Private Institutions

State or Region	Institutions		Students enrolled		Per cent of students enrolled in terminal curricula
	Reporting	Offering terminal curricula	In all curricula	In terminal curricula	
Totals	**222**	**143**	**34,086**	**11,246**	**33**
New England	**20**	**17**	**3,331**	**2,176**	**65**
Connecticut	7	6	995	730	73
Maine	3	2	445	198	44
Massachusetts	6	5	1,204	904	75
New Hampshire	2	2	366	181	49
Vermont	2	2	321	163	51
Middle States	**30**	**23**	**3,716**	**1,372**	**37**
Dist. of Columbia	4	3	248	101	41
Maryland	7	6	941	391	42
New Jersey	3	3	721	199	28
New York	6	6	698	408	58
Pennsylvania	10	5	1,108	273	25
North Central	**61**	**32**	**8,460**	**2,271**	**27**
Arizona	0	—	—	—	—
Arkansas	1	0	115	0	0
Colorado	2	1	375	206	55
Illinois	9	7	1,924	399	21
Indiana	1	1	54	8	15
Iowa	8	7	991	529	53
Kansas	7	5	561	241	43
Michigan	3	1	116	28	24
Minnesota	4	0	254	0	0
Missouri	10	5	2,943	566	19
Nebraska	3	2	229	77	34
New Mexico	0	—	—	—	—
North Dakota	0	—	—	—	—
Ohio	2	0	231	0	0
Oklahoma	3	0	180	0	0
South Dakota	4	3	314	217	69
West Virginia	0	—	—	—	—
Wisconsin	4	0	173	0	0
Southern	**92**	**61**	**15,823**	**5,033**	**32**
Alabama	5	3	725	294	41
Florida	4	2	937	332	35
Georgia	7	1	1,088	30	3
Kentucky	12	9	2,182	1,225	56
Louisiana	1	1	72	40	56
Mississippi	5	3	483	189	39
North Carolina	18	12	3,890	705	18
South Carolina	7	4	676	262	39
Tennessee	8	7	1,751	630	36
Texas	13	8	1,952	186	10
Virginia	12	11	2,067	1,140	55
Northwest	**10**	**6**	**1,901**	**175**	**9**
Idaho	0	—	—	—	—
Montana	0	—	—	—	—
Oregon	2	1	630	105	17
Utah	1	0	160	0	0
Washington	7	5	1,111	70	6
Western (California)	**9**	**4**	**855**	**219**	**26**

Group	Number offering terminal curricula	Number offering courses in									
		Gen. cultural	Agriculture	Business	Engineering	Fine arts	Health services	Home economics	Journalism	Public service	Miscellaneous
All Institutions	293	114	59	225	82	137	71	83	71	164	46
Public	150	63	50	122	65	68	45	44	48	91	26
Private	143	51	9	103	17	69	26	39	23	73	20
Region—Public											
New England	0	—	—	—	—	—	—	—	—	—	—
Middle states	1	1	0	1	0	0	0	0	0	0	0
North Central	76	21	13	58	20	21	15	9	18	43	11
Southern	32	15	9	23	11	14	7	9	5	20	1
Northwest	6	0	0	5	2	1	2	2	0	2	2
Western (California)	35	26	28	35	32	32	21	24	25	26	12
Region—Private											
New England	17	3	1	13	4	7	7	7	4	2	3
Middle states	23	13	1	18	3	13	4	9	6	4	5
North Central	32	13	2	24	4	12	5	4	6	26	6
Southern	61	19	4	41	5	30	6	17	5	38	5
Northwest	6	2	0	3	1	4	3	0	2	2	1
Western (California)	4	1	1	4	0	3	1	2	0	1	0
Size—Public											
Small (0–99)	13	2	2	7	2	2	3	2	1	7	2
Medium (100–499)	98	39	28	80	36	38	22	25	26	62	13
Large (500–999)	16	9	7	14	10	10	5	6	7	7	3
Very large (1,000 and over)	23	13	13	21	17	18	15	11	14	15	8
Size—Private											
Small (0–99)	43	17	2	27	3	17	5	8	6	18	6
Medium (100–499)	95	34	7	71	12	49	19	30	16	55	13
Large (500–999)	3	0	0	3	2	2	1	1	1	0	1
Very large (1,000 and over)	2	0	0	2	0	1	1	0	0	0	0
Type of Control—Public											
Local	124	59	43	104	55	62	43	36	46	77	22
State	26	4	7	18	10	6	2	8	2	14	4
Type of Control—Private											
Denominational	93	30	7	69	9	43	14	20	12	61	13
Undenominational, nonprofit	42	16	2	26	8	19	10	15	9	9	5
Proprietary	8	5	0	8	0	7	2	4	2	3	2
Sex of Students—Private											
Coeducational	79	23	8	54	16	28	14	14	13	48	13
Women	58	28	0	42	0	41	12	25	9	25	5
Men	6	0	1	7	1	0	0	0	1	0	2
Negro	13	2	2	2	1	1	1	3	0	12	0
Public	4	0	1	1	1	0	1	1	0	3	0
Private	9	2	1	1	0	1	0	2	0	9	0

* Junior colleges which offered curricula in a field but reported no students enrolled in them are not included in this table.

Group	Number enrolled in all terminal curricula	Number enrolled in									
		Gen. cultural	Agriculture	Business	Engineering	Fine arts	Health services	Home economics	Journalism	Public service	Miscellaneous
All Institutions	41,507	6,205	1,673	14,511	4,449	3,406	1,603	1,387	808	6,500	965
Public	30,261	4,724	1,631	11,278	3,915	2,341	1,029	876	673	3,033	761
Private	11,246	1,481	42	3,233	534	1,065	574	511	135	3,467	204
Region—Public											
New England	0	–	–	–	–	–	–	–	–	–	–
Middle states	81	51	0	30	0	0	0	0	0	0	0
North Central	7,389	981	121	3,613	704	189	239	54	128	1,208	152
Southern	4,313	774	854	813	306	179	88	400	18	825	56
Northwest	918	0	0	285	134	2	62	7	0	157	271
Western (California)	17,560	2,918	656	6,537	2,771	1,971	640	415	527	843	282
Region—Private											
New England	2,176	302	5	848	386	102	248	188	27	36	34
Middle states	1,372	413	1	362	46	287	52	110	25	33	43
North Central	2,271	200	3	615	50	138	76	32	51	1,029	77
Southern	5,033	532	31	1,324	47	490	48	156	24	2,333	48
Northwest	175	23	0	14	5	29	91	0	8	3	2
Western (California)	219	11	2	70	0	19	59	25	0	33	0
Size—Public											
Small (0–99)	231	32	5	75	4	3	21	4	2	83	2
Medium (100–499)	10,192	1,601	904	3,415	861	413	209	507	152	1,905	225
Large (500–999)	4,236	818	172	1,762	559	267	151	77	73	294	63
Very large (1,000 and over)	15,602	2,273	550	6,026	2,491	1,658	648	288	446	751	471
Size—Private											
Small (0–99)	1,474	237	2	393	14	131	64	61	32	502	38
Medium (100–499)	9,215	1,244	40	2,514	435	849	466	448	101	2,965	153
Large (500–999)	316	0	0	152	85	60	15	2	2	0	0
Very large (1,000 and over)	241	0	0	174	0	25	29	0	0	0	13
Type of Control—Public											
Local	25,467	4,289	778	10,245	3,407	2,238	967	485	634	2,066	358
State	4,794	435	853	1,033	508	103	62	391	39	967	403
Type of Control—Private											
Denominational	7,380	685	39	2,072	73	538	279	178	93	3,272	151
Undenominational, nonprofit	3,272	656	3	954	461	387	264	310	34	178	25
Proprietary	594	140	0	207	0	140	31	23	8	17	28
Sex of Students—Private											
Coeducational	6,425	505	40	1,651	500	226	178	90	64	3,037	134
Women	4,629	976	0	1,429	0	839	396	421	68	430	70
Men	192	0	2	153	34	0	0	0	3	0	0
Negro	1,358	18	64	13	70	5	18	146	0	1,024	0
Public	553	0	62	7	70	0	18	131	0	265	0
Private	805	18	2	6	0	5	0	15	0	759	0

Table XXXIII. CONTINUATION OF JUNIOR COLLEGE STUDENTS
Public Institutions

State or Region	Number of institutions reporting	Number of Freshmen 1937–38	Number of Sophomores 1938–39	Number of Graduates 1939	Number of Graduates continuing formal education
Totals	**190**	**40,868**	**23,989**	**13,912**	**7,513**
New England	—	—	—	—	—
Connecticut	0	—	—	—	—
Maine	0	—	—	—	—
Massachusetts	0	—	—	—	—
New Hampshire	0	—	—	—	—
Vermont	0	—	—	—	—
Middle States	**5**	**345**	**161**	**150**	**88**
Canal Zone	1	92	52	41	21
Maryland	0	—	—	—	—
New Jersey	0	—	—	—	—
New York	0	—	—	—	—
Pennsylvania	4	253	109	109	67
North Central	**99**	**16,064**	**9,782**	**5,820**	**3,199**
Arizona	2	680	255	203	109
Arkansas	6	1,091	614	342	191
Colorado	2	455	173	130	53
Illinois	6	2,585	2,158	931	565
Indiana	1	78	54	48	26
Iowa	22	1,072	616	413	206
Kansas	13	2,261	1,366	908	421
Michigan	8	1,723	1,010	662	415
Minnesota	10	1,356	859	570	305
Missouri	9	1,694	1,131	589	313
Nebraska	2	123	113	60	26
New Mexico	1	168	112	101	90
North Dakota	2	384	223	188	38
Ohio	0	—	—	—	—
Oklahoma	14	2,169	963	614	383
South Dakota	0	—	—	—	—
West Virginia	1	225	135	61	58
Wisconsin	—	—	—	—	—
Southern	**47**	**9,050**	**4,806**	**2,954**	**1,609**
Alabama	1	161	97	86	36
Florida	1	63	32	18	10
Georgia	10	1,811	1,134	726	338
Kentucky	1	51	30	17	5
Louisiana	1	268	165	92	67
Mississippi	10	1,693	1,050	716	361
North Carolina	0	—	—	—	—
South Carolina	0	—	—	—	—
Tennessee	1	182	146	101	75
Texas	22	4,821	2,152	1,198	717
Virginia	0	—	—	—	—
Northwest	**5**	**943**	**568**	**408**	**194**
Idaho	1	90	50	35	12
Montana	1	184	129	99	23
Oregon	0	—	—	—	—
Utah	3	669	389	274	159
Washington	0	—	—	—	—

Table XXXIV. Continuation of Junior College Students

Private Institutions

State or Region	Number of institutions reporting	Number of			
		Freshmen 1937–38	Sophomores 1938–39	Graduates 1939	Graduates continuing formal education
Totals	**202**	**16,958**	**10,691**	**8,589**	**4,100**
New England	**19**	**1,773**	**1,150**	**948**	**381**
Connecticut	5	500	281	204	61
Maine	3	255	140	126	46
Massachusetts	6	640	429	364	137
New Hampshire	2	189	154	123	56
Vermont	3	189	146	131	81
Middle States	**27**	**1,947**	**1,127**	**981**	**527**
Dist. of Columbia	4	159	88	79	41
Maryland	7	550	295	241	151
New Jersey	3	304	155	155	70
New York	6	418	262	226	99
Pennsylvania	7	516	327	280	166
North Central	**49**	**4,034**	**2,526**	**2,215**	**1,145**
Arizona	0	—	—	—	—
Arkansas	0	—	—	—	—
Colorado	2	230	101	96	42
Illinois	7	789	531	478	239
Indiana	1	21	11	10	6
Iowa	6	502	289	243	78
Kansas	7	296	221	195	65
Michigan	2	56	35	29	10
Minnesota	3	109	84	62	47
Missouri	10	1,534	1,006	893	543
Nebraska	3	180	90	81	30
New Mexico	0	—	—	—	—
North Dakota	0	—	—	—	—
Ohio	1	26	21	11	9
Oklahoma	1	42	31	19	12
South Dakota	2	135	30	27	5
West Virginia	1	46	22	19	11
Wisconsin	3	68	54	52	48
Southern	**87**	**7,721**	**4,935**	**3,854**	**1,703**
Alabama	5	450	260	191	89
Florida	4	477	318	264	97
Georgia	6	509	329	252	113
Kentucky	10	809	675	512	157
Louisiana	1	50	33	28	16
Mississippi	6	297	162	170	79
North Carolina	18	1,814	1,197	943	522
South Carolina	8	427	263	228	60
Tennessee	8	820	544	411	155
Texas	10	1,063	589	378	169
Virginia	11	1,005	565	477	246
Northwest	**11**	**974**	**620**	**394**	**215**
Idaho	1	141	105	75	22
Montana	0	—	—	—	—
Oregon	2	211	107	65	35
Utah	1	75	41	38	32
Washington	7	547	367	216	126

Table XXXV. Time Devoted to Occupational Courses and Teaching and Nonteaching Experience for Instructors in Terminal Curricula

	All fields	Agri-culture	Busi-ness	Engi-neering	Fine arts	Health serv-ices	Home eco-nomics	Jour-nalism	Public service
No. of instructors	**1,076**	**24**	**445**	**166**	**134**	**77**	**68**	**8**	**154**
Years of teaching experience									
50–54	1	0	1	0	0	0	0	0	0
45–49	0	0	0	0	0	0	0	0	0
40–44	1	0	1	0	0	0	0	0	0
35–39	4	0	2	1	1	0	0	0	0
30–34	18	0	6	2	2	1	0	0	7
25–29	27	1	11	1	2	2	2	0	8
20–24	71	3	24	13	5	4	6	0	16
15–19	146	3	57	22	25	7	9	1	22
10–14	222	6	95	35	24	17	12	3	30
5–9	254	4	116	36	33	24	13	2	26
4	67	1	30	18	6	3	5	1	3
3	63	1	37	8	4	7	2	0	4
2	79	2	27	19	13	3	4	0	11
1	55	2	24	10	5	4	5	0	5
None reported	68	1	14	1	14	5	10	1	22
Years of nonteaching experience in occupation									
30–34	3	0	1	1	0	0	0	0	0*
25–29	5	0	0	2	1	0	1	1	0
20–24	13	0	2	4	1	2	2	0	1
15–19	28	4	6	13	2	1	0	0	0
10–14	57	5	22	19	4	4	1	0	0
5–9	141	2	68	39	14	9	3	1	0
4	42	3	19	13	2	1	2	1	1
3	48	1	25	12	4	2	3	0	0
2	62	2	39	8	3	8	2	0	1
1	72	1	48	3	9	5	2	1	1
Experience reported but not number of years	160	1	75	21	36	6	16	3	2
No experience reported	328	5	140	31	58	39	36	1	18
Per cent of time devoted to occupational subject†									
100	593	15	256	121	83	36	38	3	41
90	16	0	10	0	1	1	1	0	3
80	19	1	9	3	2	2	1	0	1
75	34	0	15	1	4	4	1	0	9
70	5	0	1	1	2	0	0	0	1
60	26	0	12	4	1	1	2	1	5
50	89	2	37	6	11	6	4	1	22
40	28	0	16	6	0	1	1	1	3
30	37	1	17	0	6	4	2	0	7
25	41	2	16	7	3	2	2	0	9
20	71	1	32	6	1	8	2	2	19
10	60	0	15	1	9	4	7	0	24
Not reported	57	2	9	10	11	8	7	0	10

---

* Instructors in teaching are not included in the figures for "Years of nonteaching experience in occupation."

† Not grouped in intervals because nearly all institutions reported in terms of the percentages listed.

Table XXXVI. Percentage Summary of Guidance and Personnel Data from Information Blank Classified by Size and Control of Junior Colleges

Item*	Public					Private				
	Total	Small (0–99)	Medium (100–499)	Large (500–999)	Very large (over 1,000)	Total	Small (0–99)	Medium (100–499)	Large (500–999)	Very large (over 1,000)
Number reporting	**144**	**21**	**89**	**14**	**20**	**127**	**42**	**79**	**4**	**2**
Staff										
Full-time	12	5	4	21	45	17	17	18	0	50
Alphabetical	35	14	37	57	30	34	31	33	50	100
Occupational	62	38	65	64	70	60	52	63	75	50
Committee	44	33	44	64	45	39	24	43	100	50
Other	21	10	19	21	40	30	31	29	0	100
Student information										
Ambition	66	57	62	79	85	64	55	67	75	100
Educational Plans	60	57	54	71	80	62	60	62	75	100
Mental Test	68	33	74	57	85	79	74	80	100	100
Achievement Test	43	24	43	50	60	44	52	39	50	50
Vocational Test	36	14	33	57	60	23	12	27	50	50
Personality Test	33	20	28	50	55	31	21	33	50	100
Special Test	13	20	11	14	15	18	12	19	50	50
Other tests	35	29	37	21	40	40	33	41	75	50
Other information	40	33	34	50	65	50	48	52	25	100
Occupational information										
Full course	13	10	12	14	20	16	17	11	50	100
Part course	33	24	30	36	50	32	21	35	50	100
Special study	16	10	17	14	20	20	17	23	25	0
Other	66	52	64	64	90	61	55	63	75	50
Job opportunities	45	29	42	50	75	27	26	28	25	0
Follow-up studies										
Made	34	33	28	43	55	41	26	48	50	50
Published	6	5	4	14	5	3	0	4	0	50
Unpublished	19	14	15	21	45	16	10	20	0	0
Questionnaires	6	5	8	0	0	13	10	14	25	0
Other	1	5	1	0	5	7	7	8	0	0

* For fuller explanation of items listed in this column see Appendix E, *Information Blank*, Part A, Section VI, pp. 257–58.

Appendix C

FEDERAL AID FOR JUNIOR COLLEGES

Extracts from Smith-Hughes Act

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby annually appropriated, out of any money in the Treasury not otherwise appropriated, the sums provided in sections two, three, and four of this Act, to be paid to the respective States for the purpose of cooperating with the States in paying the salaries of teachers, supervisors, and directors of agricultural subjects, and teachers of trade, home economics, and industrial subjects, and in the preparation of teachers of agricultural, trade, industrial, and home economics subjects; . . .

Sec. 2. Said sums shall be allotted to the States in the proportion which their rural population bears to the total rural population in the United States, not including outlying possessions, according to the last preceding United States census: . . .

Sec. 3. That not more than twenty per centum of the money appropriated under this Act for the payment of salaries of teachers of trade, home economics, and industrial subjects, for any year, shall be expended for the salaries of teachers of home economics subjects.

Sec. 6. It shall be the duty of the Federal Board for Vocational Education to make, or cause to have made studies, investigations, and reports, with particular reference to their use in aiding the States in the establishment of vocational schools and classes and in giving instruction in agriculture, trades and industries, commerce and commercial pursuits, and home economics. Such studies, investigations, and reports shall include agriculture and agricultural processes and requirements upon agricultural workers; trades, industries, and apprenticeships, trade and industrial requirements upon industrial workers, and classification of industrial processes and pursuits; commerce and commercial pursuits and requirements upon commercial workers; home management, domestic science, and the study of related facts and principles; and problems of administration of vocational schools and of courses of study and instruction in vocational subjects. . . .

Sec. 8. That in order to secure the benefits of the appropriation for any purpose specified in this Act, the State board shall prepare plans, showing the kinds of vocational education for which it is proposed that the appropriation shall be used; the kinds of schools and equipment; courses of study; methods of instruction; qualifications of teachers; and, in the case of agricultural subjects the qualifications of supervisors or directors; plans for the training of teachers; and, in the case of agricultural subjects, plans for the supervision of agricultural education, as provided for in section ten. Such plans shall be submitted by the State board to the Federal Board for Vocational Education, and if the Federal board finds the same to be in conformity with the provisions and purposes of this Act, the same shall be approved. . . .

Sec. 9. That the appropriation for the salaries of teachers, supervisors, or directors of agricultural subjects and of teachers of trade, home economics, and industrial subjects shall be devoted exclusively to the payment of salaries of such teachers, supervisors, or directors having the minimum qualifications set up for the State by the State board, with the approval of the Federal Board for Vocational Education. The cost of instruction supplementary to the instruction in agricultural and in trade, home economics, and industrial subjects provided for in this Act, necessary to build a well-rounded course of training, shall be borne by the State and local communities, and no part of the cost thereof shall be borne out of the appropriations herein made. The moneys expended under the provisions of this Act, in cooperation with the States, for the salaries of teachers, supervisors, or directors of agricultural subjects, or for the salaries of teachers of trade, home economics, and industrial subjects, shall be conditioned that for each dollar of Federal money expended for such salaries the State or local community, or both, shall expend an equal amount for such salaries; . . .

Sec. 10. That any State may use the appropriation for agricultural purposes, or any part thereof allotted to it, under the provisions of this Act, for the salaries of teachers, supervisors, or directors of agricultural subjects, either for the salaries of teachers of such subjects in schools or classes or for the salaries of supervisors or directors of such subjects under a plan of supervision for the State to be set up by the State board, with the approval of the Federal Board for Vocational Education. That in order to receive the benefits of such appropriation for the salaries of teachers, supervisors, or directors of agricultural subjects the State board of any State shall provide in its plan for agricultural education that such education shall be that which is under public supervision or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and be designed to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home; that the State or local community, or both, shall provide the necessary plant and equipment determined upon by the State board, with the approval of the Federal Board for Vocational Education, as the minimum requirement for such education in schools and classes in the State; . . .

Sec. 11. That in order to receive the benefits of the appropriation for the salaries of teachers of trade, home economics, and industrial subjects the State board of any State shall provide in its plan for trade, home economics, and industrial education that such education shall be given in schools or classes under public supervision or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and shall be designed to meet the needs of persons over fourteen years of age who are preparing for a trade or industrial pursuit or who have entered upon the work of a trade or industrial pursuit; that the State or local community, or both, shall provide the necessary plant and equipment determined upon by the State board, with the approval of the Federal Board for Vocational Education, as the minimum requirement in such State for education for any given trade or industrial pursuit; . . .

Extracts from George-Deen Act

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of providing for the further development of vocational education in the several States and Territories there is hereby authorized to be appropriated for the fiscal year beginning July 1, 1937, and annually thereafter, the sum of $12,000,000: Provided, That the several States and Territories shall be required to match by State or local funds or both 50 per centum of the appropriations authorized under the provisions of this section until June 30, 1942, 60 per centum for the year ending June 30, 1943, 70 per centum for the year ending June 30, 1944, 80 per centum for the year ending June 30, 1945, 90 per centum for the year ending June 30, 1946, and annually thereafter 100 per centum of the appropriations authorized under the provisions of this section. One-third of this sum each year shall be allotted to the States and Territories in the proportion that their farm population bears to the total farm population of the United States. . . . One-third of the sum appropriated for each fiscal year shall be allotted to the States and Territories in the proportion that their rural population bears to the total rural population of the United States. . . . One-third of the sum appropriated for each fiscal year shall be allotted to the States and Territories in the proportion that their nonfarm population bears to the total nonfarm population of the United States. . . .

Sec. 6. The appropriations made by this Act shall be in addition to, and shall be subject to the same conditions and limitations as, the appropriations made by the Act entitled "An Act to provide for the promotion of vocational education; to provide cooperation with the States in the promotion of such education in agriculture and in the trades and industries; to provide cooperation with the States in the preparation of teachers of vocational subjects; and to appropriate money and regulate its expenditures," approved February 23, 1917, except that . . .

Sec. 6a. No part of the appropriations herein authorized shall be expended in industrial-plant training programs, except such industrial-plant training be bona-fide vocational training, and not a device to utilize the services of vocational trainees for private profit.

Junior Colleges Receiving Federal Aid Under the Smith-Hughes and George-Deen Acts, 1939-40, and Fields for Which This Aid Was Given

ARIZONA

- Gila Junior College
  - Agriculture, home economics
- Phoenix Junior College
  - Agriculture

ARKANSAS

- Arkansas Polytechnic College
  - Agriculture, home economics, trades and industries, teacher training
- Central Arkansas, Jr. Ag. Coll.
  - Home economics
- State A. and M. College
  - Agriculture

CALIFORNIA

- Bakersfield Junior College
  - Trades and industries
- Central Junior College
  - Business education
- Chaffey Junior College
  - Business education, trades and industries
- Citrus Junior College
  - Trades and industries
- Coalinga Extension Center
  - Trades and industries
- Compton Junior College
  - Trades and industries
- Fresno City Junior College
  - Home economics, trades and industries
- Fullerton Junior College
  - Trades and industries
- Glendale Junior College
  - Trades and industries
- Lassen Junior College
  - Trades and industries
- Long Beach Junior College
  - Trades and industries
- Los Angeles City College
  - Trades and industries
- Modesto Evening Junior College
  - Home economics, trades and industries
- Modesto Junior College
  - Agriculture, business education
- Pasadena Junior College
  - Business education, home economics
- Pomona Junior College
  - Trades and industries
- Riverside Junior College
  - Trades and industries
- Sacramento Junior College
  - Business education, trades and industries
- Salinas Evening Junior College
  - Trades and industries
- Salinas Junior College
  - Agriculture
- San Bernardino Valley Jr. Coll.
  - Business education, trades and industries
- San Diego Vocational Jr. Coll.
  - Trades and industries
- San Francisco Junior College
  - Business education, trades and industries
- San Luis Obispo Junior College
  - Home economics
- San Mateo Junior College
  - Business education, home economics, trades and industries
- Santa Ana Junior College
  - Trades and industries
- Santa Maria Junior College
  - Home economics
- Taft Junior College
  - Trades and industries
- Ventura Evening Junior College
  - Business education, trades and industries
- Ventura Junior College
  - Agriculture
- Visalia Junior College
  - Trades and industries

COLORADO
- Fort Lewis Junior College
  - Agriculture
- Mesa County Junior College
  - Agriculture, home economics, teacher training
- Southeastern Colorado, J. C. of
  - Business education
- Trinidad State Junior College
  - Agriculture, business education, home economics, trades and industries, teacher training

FLORIDA
- Palm Beach Junior College
  - Business education

GEORGIA
- Abraham Baldwin Agric. Coll.
  - Teacher training
- Norman Junior College
  - Home economics
- Reinhardt College
  - Agriculture
- West Georgia College
  - Agriculture, trades and industries

IDAHO
- Idaho, Southern Br. of Univ. of
  - Trades and industries

KANSAS
- Parsons Junior College
  - Trades and industries
- Western University
  - Home economics

MISSISSIPPI
- Okolona Industrial School
  - Agriculture

NORTH DAKOTA
- State Normal Industrial School
  - Home economics
- North Dakota State School of Science
  - Trades and industries, teacher training

OKLAHOMA
- Northeastern Oklahoma Jr. Coll.
  - Business education, teacher training
- University Junior College
  - Business education

TEXAS
- John Tarleton Agric. Coll.
  - Teacher training
- North Texas Jr. Agric. Coll.
  - Trades and industries, teacher training
- Paris Junior College
  - Trades and industries

UTAH
- Carbon College
  - Business education, home economics, trades and industries
- Dixie Junior College
  - Business education, home economics, trades and industries
- Snow College
  - Trades and industries
- Utah, Branch Agric. Coll. of
  - Agriculture, business education, home economics
- Weber College
  - Business education, home economics, trades and industries, teacher training

WEST VIRGINIA
- Potomac State School
  - Agriculture

Appendix D

LIST OF COOPERATING JUNIOR COLLEGES

Institutions which furnished significant data on *Information Blank* as summarized in Chapters V and VI. (The letter "N" following name indicates Negro institution.)

ALABAMA
- Snead Junior College
- Walker Junior College

ARIZONA
- Gila Junior College
- Phoenix Junior College

ARKANSAS
- Central College
- Dunbar Junior College (N)
- Little Rock Junior College
- State A. & M. College

CALIFORNIA
- Antelope Valley Junior College
- Brawley Junior College
- Chaffey Junior College
- Citrus Junior College
- Coalinga Extension Center
- Cumnock Junior College
- Fullerton Junior College
- Glendale Junior College
- La Sierra College
- Long Beach Junior College
- Los Angeles City College
- Modesto Junior College
- Oceanside-Carlsbad Jr. Coll.
- Pasadena Junior College
- Pomona Junior College
- Riverside Junior College
- Sacramento Junior College
- Salinas Junior College
- Salinas Evening Junior College
- San Bernardino Valley Jr. Coll.
- San Mateo Junior College
- Stockton Evening Junior College
- Taft Junior College
- Yuba Junior College

COLORADO
- Colorado Woman's College
- Pueblo Junior College
- Trinidad State Junior College

CONNECTICUT
- Commerce, Junior College of
- Hillyer Junior College
- Morse Junior College
- New Haven YMCA Jr. Coll.
- Physical Therapy, Jr. Coll. of
- St. Thomas Seminary

DISTRICT OF COLUMBIA
- Columbus University Jr. Coll.
- Fairmont Junior College
- Georgetown Visitation Jr. Coll.
- Holton-Arms Junior College
- Mount Vernon Seminary

FLORIDA
- Bethune-Cookman College (N)
- Florida Normal & Ind. Inst. (N)
- Palm Beach Junior College

GEORGIA
- Andrew College
- Armstrong Junior College
- Augusta, Junior College of
- Georgia Southwestern College
- Georgia Military College
- North Georgia College
- Rabun Gap-Nacoochee School

IDAHO

Boise Junior College
Idaho, Southern Br. of Univ. of

ILLINOIS

Blackburn College
Carl Schurz Evening Jr. Coll.
Evanston Collegiate Institute
Ferry Hall
Frances Shimer Junior College
Herzl Junior College
LaSalle-Peru-Oglesby Jr. Coll.
Lyons Township Junior College
Monticello College
Morton Junior College
North Park College
Springfield Junior College
Woodrow Wilson Junior College
Wright Junior College

IOWA

Albia Junior College
Burlington Junior College
Centerville Junior College
Eagle Grove Junior College
Ellsworth Junior College
Estherville Junior College
Fort Dodge Junior College
Graceland College
Independence Junior College
Marshalltown Junior College
Mount Mercy Junior College
Muscatine Junior College
Osceola Junior College
Ottumwa Heights College
Waldorf College
Washington Junior College
Waukon Junior College
Webster City Junior College

KANSAS

Arkansas City Junior College
Central College
Chanute Junior College
Dodge City Junior College
Garden City Junior College
Highland Junior College
Paola, College of
Parsons Junior College
Sacred Heart Junior College
St. John's College
Tabor College
Western University (N)

KENTUCKY

Ashland Junior College
Bethel Woman's College
Pikeville College

MAINE

Portland Junior College
Portland Junior Technical Coll.
Westbrook Junior College

MARYLAND

Baltimore, Jr. Coll. of Univ. of
Columbia Junior College
Mount St. Agnes Junior College
National Park College
St. Mary's Female Sem.-Jr. Coll.

MASSACHUSETTS

Cambridge School of Liberal Arts
Garland School
Lasell Junior College
Pine Manor Junior College

MICHIGAN

Bay City Junior College
Fordson Junior College
Gogebic Junior College
Highland Park Junior College
Jackson Junior College
Muskegon Junior College
Port Huron Junior College

MINNESOTA

Albert Lea Junior College
Bethany Lutheran College
Brainerd Junior College
Crosby-Ironton Junior College
Duluth Junior College
Ely Junior College
Eveleth Junior College
Hibbing Junior College
Itasca Junior College
Rochester Junior College
Tracy Junior College

Virginia Junior College
Worthington Junior College

MISSISSIPPI

Copiah-Lincoln Junior College
East Central Junior College
East Mississippi Jr. Coll.
Gulf Park College
Harrison-Stone-Jackson Jr. Coll.
Jones County Junior College
Pearl River Junior College
Southwest Mississippi Jr. Coll.
Sunflower Junior College
Wood Junior College

MISSOURI

Central Wesleyan College
Christian College
Conception Junior College
Cottey Junior College
Jefferson City Junior College
Joplin Junior College
Kansas City, Junior College of
Kemper Military School
Monett Junior College
St. Joseph Junior College
Stephens College
Stowe Teachers Coll., Jr. Coll. of
William Woods College

MONTANA

Billings Polytechnic Institute
Custer County Junior College
Northern Montana College

NEBRASKA

Hebron Junior College
McCook Junior College
Scottsbluff Junior College

NEW HAMPSHIRE

Colby Junior College
Stoneleigh College
Tilton Junior College

NEW JERSEY

Centenary Junior College
Essex Junior College
Morris Junior College

NEW MEXICO

Eastern New Mexico College
New Mexico Military Institute

NEW YORK

Cazenovia Seminary
Concordia Collegiate Institute
Finch Junior College
Packard School
Packer Collegiate Institute

NORTH CAROLINA

Barber-Scotia Jr. Coll. (N)
Brevard College
Campbell College
Lees-McRae College
Louisburg College
Mars Hill College
Peace Junior College
Pfeiffer Junior College
Presbyterian Junior College
St. Genevieve-of-the-Pines J. C.
St. Mary's Junior College

NORTH DAKOTA

North Dakota School of Forestry

OHIO

Giffin College
Toledo Jr. Coll., University of
Urbana Junior College

OKLAHOMA

Altus Junior College
Bacone College
Bartlesville Junior College
Duncan Junior College
El Reno Junior College
Kiowa County Junior College
Monte Cassino Junior College
Murray State School of Agric.
Muskogee Junior College
Northeastern Oklahoma Jr. Coll.
Okmulgee Junior College
Sapulpa Junior College
University Junior College
Woodward Junior College

OREGON

St. Helen's Hall Junior College

PENNSYLVANIA
- Alliance College
- Altoona Undergraduate Center
- Bucknell University Jr. Coll.
- DuBois Undergraduate Center
- Hershey Junior College
- Johnstown Center, U. of Pittsburgh
- Messiah Bible College
- Mount Aloysius Junior College
- Schuylkill Undergraduate Center
- Scranton-Keystone Jr. College
- Valley Forge Military Jr. Coll.
- Williamsport Dickinson Seminary
- Wyomissing Polytechnic Inst.

SOUTH CAROLINA
- Anderson College
- Friendship Junior College (N)
- Wesleyan Methodist College

SOUTH DAKOTA
- Freeman Junior College

TENNESSEE
- Hiwassee College
- Southern Junior College
- Tennessee Wesleyan College
- Ward-Belmont School

TEXAS
- Edinburg Junior College
- Hardin Junior College
- Hillsboro Junior College
- John Tarleton Agricultural Coll.
- Kilgore College
- Lamar College
- North Texas Jr. Agric. Coll.
- Paris Junior College
- Ranger Junior College
- St. Philip's Junior College (N)
- San Angelo College
- San Antonio Junior College
- Schreiner Institute
- Temple Junior College
- Texarkana College
- Texas Lutheran College
- Texas Military College
- Victoria Junior College
- Wayland Baptist College

UTAH
- Carbon College
- Dixie Junior College
- Snow College
- Weber College
- Westminster College

VERMONT
- Goddard College
- Green Mountain Junior College
- Vermont Junior College

VIRGINIA
- Arlington Hall Junior College
- Averett College
- Fairfax Hall Junior College
- Southern Seminary & Jr. Coll.
- Stratford College
- Virginia Intermont College

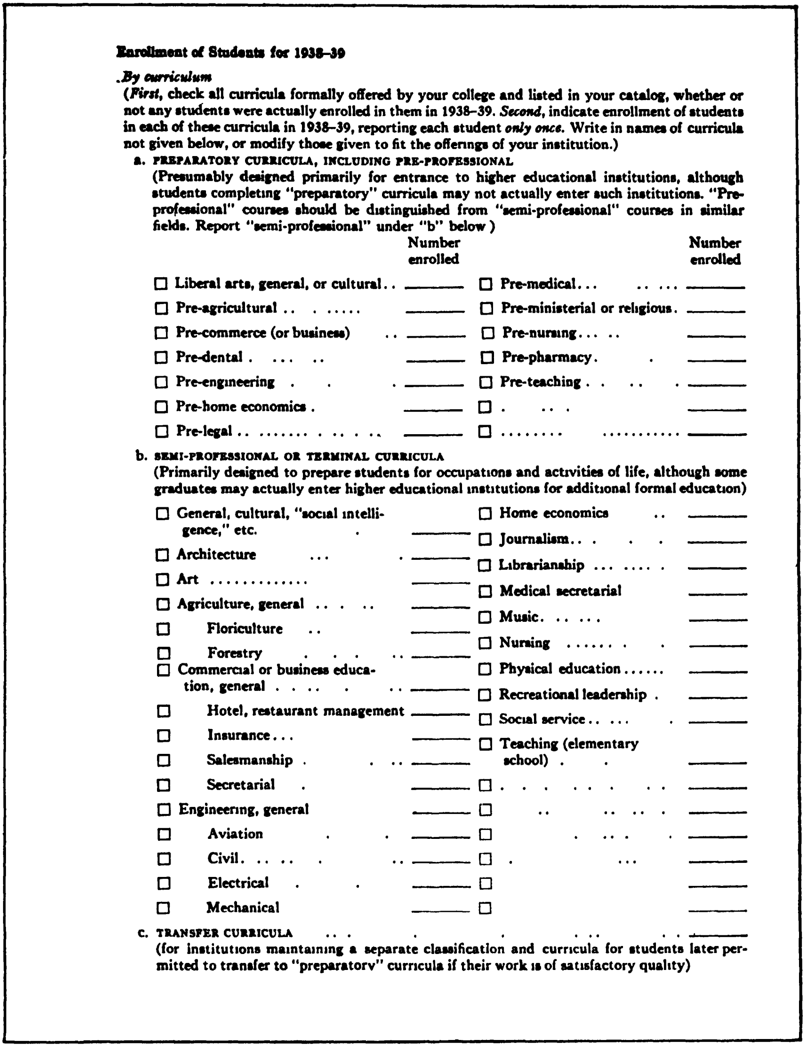
WASHINGTON
- Centralia Junior College
- Clark Junior College
- Grays Harbor Junior College
- Lower Columbia Junior College
- Spokane Junior College
- Yakima Valley Junior College

WEST VIRGINIA
- Potomac State School

WISCONSIN
- Wayland Junior College
- Wisconsin, Ext. Div. of Univ. of

Appendix E

FORMS USED



Enrollment of Students for 1938–39

.By curriculum

(*First*, check all curricula formally offered by your college and listed in your catalog, whether or not any students were actually enrolled in them in 1938–39. *Second*, indicate enrollment of students in each of these curricula in 1938–39, reporting each student *only once*. Write in names of curricula not given below, or modify those given to fit the offerings of your institution.)

a. PREPARATORY CURRICULA, INCLUDING PRE-PROFESSIONAL

(Presumably designed primarily for entrance to higher educational institutions, although students completing "preparatory" curricula may not actually enter such institutions. "Pre-professional" courses should be distinguished from "semi-professional" courses in similar fields. Report "semi-professional" under "b" below)

	Number enrolled		Number enrolled
☐ Liberal arts, general, or cultural		☐ Pre-medical	
☐ Pre-agricultural		☐ Pre-ministerial or religious	
☐ Pre-commerce (or business)		☐ Pre-nursing	
☐ Pre-dental		☐ Pre-pharmacy	
☐ Pre-engineering		☐ Pre-teaching	
☐ Pre-home economics		☐	
☐ Pre-legal		☐	

b. SEMI-PROFESSIONAL OR TERMINAL CURRICULA

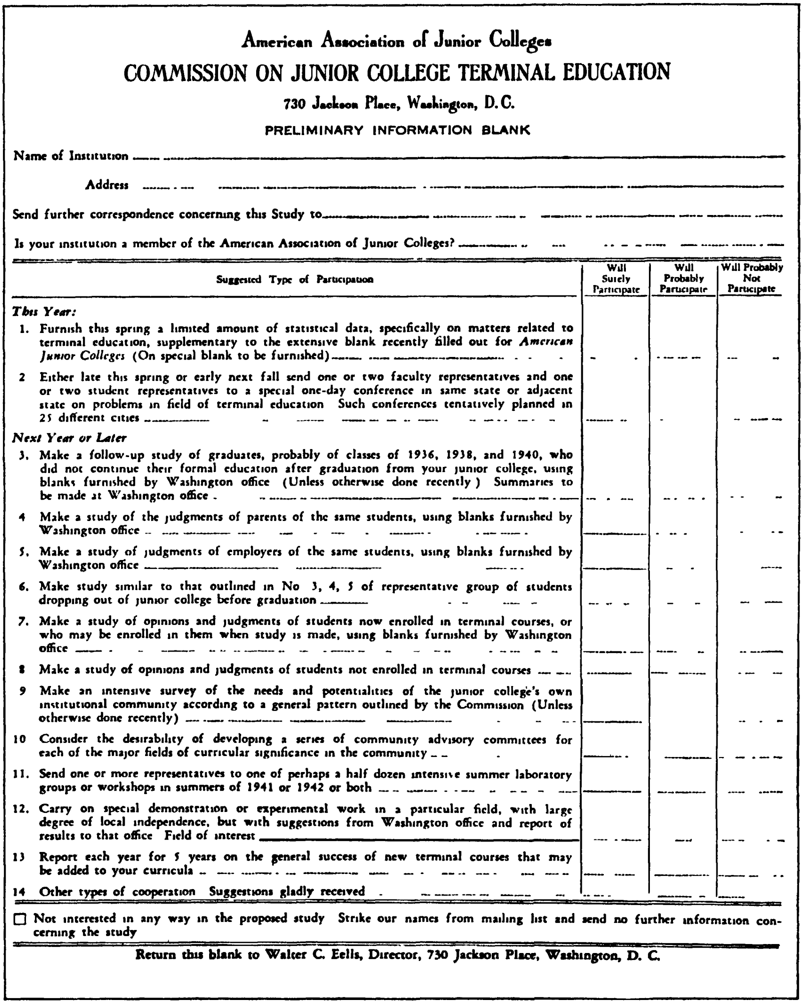
(Primarily designed to prepare students for occupations and activities of life, although some graduates may actually enter higher educational institutions for additional formal education)

☐ General, cultural, "social intelligence," etc.		☐ Home economics	
☐ Architecture		☐ Journalism	
☐ Art		☐ Librarianship	
☐ Agriculture, general		☐ Medical secretarial	
☐ Floriculture		☐ Music	
☐ Forestry		☐ Nursing	
☐ Commercial or business education, general		☐ Physical education	
☐ Hotel, restaurant management		☐ Recreational leadership	
☐ Insurance		☐ Social service	
☐ Salesmanship		☐ Teaching (elementary school)	
☐ Secretarial		☐	
☐ Engineering, general		☐	
☐ Aviation		☐	
☐ Civil		☐	
☐ Electrical		☐	
☐ Mechanical		☐	

c. TRANSFER CURRICULA . . . . ________

(for institutions maintaining a separate classification and curricula for students later permitted to transfer to "preparatory" curricula if their work is of satisfactory quality)

Figure 26. ONE PAGE OF FORM USED IN GATHERING INFORMATION FOR *American Junior Colleges*



American Association of Junior Colleges

COMMISSION ON JUNIOR COLLEGE TERMINAL EDUCATION

730 Jackson Place, Washington, D. C.

PRELIMINARY INFORMATION BLANK

Name of Institution

Address

Send further correspondence concerning this Study to

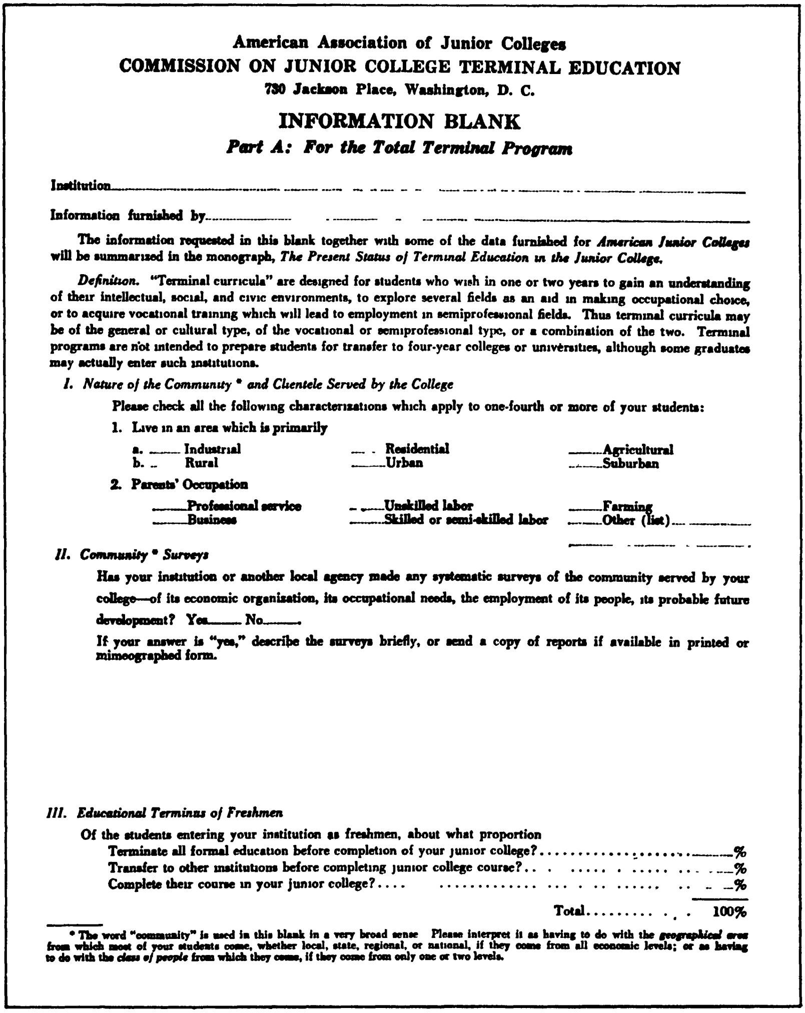
Is your institution a member of the American Association of Junior Colleges?

Suggested Type of Participation	Will Surely Participate	Will Probably Participate	Will Probably Not Participate
This Year:			
1. Furnish this spring a limited amount of statistical data, specifically on matters related to terminal education, supplementary to the extensive blank recently filled out for *American Junior Colleges* (On special blank to be furnished)			
2 Either late this spring or early next fall send one or two faculty representatives and one or two student representatives to a special one-day conference in same state or adjacent state on problems in field of terminal education Such conferences tentatively planned in 25 different cities			
Next Year or Later			
3. Make a follow-up study of graduates, probably of classes of 1936, 1938, and 1940, who did not continue their formal education after graduation from your junior college, using blanks furnished by Washington office (Unless otherwise done recently) Summaries to be made at Washington office			
4 Make a study of the judgments of parents of the same students, using blanks furnished by Washington office			
5. Make a study of judgments of employers of the same students, using blanks furnished by Washington office			
6. Make study similar to that outlined in No 3, 4, 5 of representative group of students dropping out of junior college before graduation			
7. Make a study of opinions and judgments of students now enrolled in terminal courses, or who may be enrolled in them when study is made, using blanks furnished by Washington office			
8 Make a study of opinions and judgments of students not enrolled in terminal courses			
9 Make an intensive survey of the needs and potentialities of the junior college's own institutional community according to a general pattern outlined by the Commission (Unless otherwise done recently)			
10 Consider the desirability of developing a series of community advisory committees for each of the major fields of curricular significance in the community			
11. Send one or more representatives to one of perhaps a half dozen intensive summer laboratory groups or workshops in summers of 1941 or 1942 or both			
12. Carry on special demonstration or experimental work in a particular field, with large degree of local independence, but with suggestions from Washington office and report of results to that office Field of interest			
13 Report each year for 5 years on the general success of new terminal courses that may be added to your curricula			
14 Other types of cooperation Suggestions gladly received			

☐ Not interested in any way in the proposed study Strike our names from mailing list and send no further information concerning the study

Return this blank to Walter C. Eells, Director, 730 Jackson Place, Washington, D. C.

Figure 27. Preliminary Information Blank Sent to All Junior Colleges



American Association of Junior Colleges
COMMISSION ON JUNIOR COLLEGE TERMINAL EDUCATION
730 Jackson Place, Washington, D. C.

INFORMATION BLANK

Part A: For the Total Terminal Program

Institution______________________________

Information furnished by______________________________

The information requested in this blank together with some of the data furnished for *American Junior Colleges* will be summarized in the monograph, *The Present Status of Terminal Education in the Junior College.*

Definition. "Terminal curricula" are designed for students who wish in one or two years to gain an understanding of their intellectual, social, and civic environments, to explore several fields as an aid in making occupational choice, or to acquire vocational training which will lead to employment in semiprofessional fields. Thus terminal curricula may be of the general or cultural type, of the vocational or semiprofessional type, or a combination of the two. Terminal programs are not intended to prepare students for transfer to four-year colleges or universities, although some graduates may actually enter such institutions.

*I. Nature of the Community * and Clientele Served by the College*

Please check all the following characterizations which apply to one-fourth or more of your students:

1. Live in an area which is primarily

a. ____ Industrial	____ Residential	____Agricultural
b. ____ Rural	____Urban	____Suburban

2. Parents' Occupation

____Professional service	____Unskilled labor	____Farming
____Business	____Skilled or semi-skilled labor	____Other (list)________

*II. Community * Surveys*

Has your institution or another local agency made any systematic surveys of the community served by your college—of its economic organization, its occupational needs, the employment of its people, its probable future development? Yes____ No____.

If your answer is "yes," describe the surveys briefly, or send a copy of reports if available in printed or mimeographed form.

III. Educational Terminus of Freshmen

Of the students entering your institution as freshmen, about what proportion

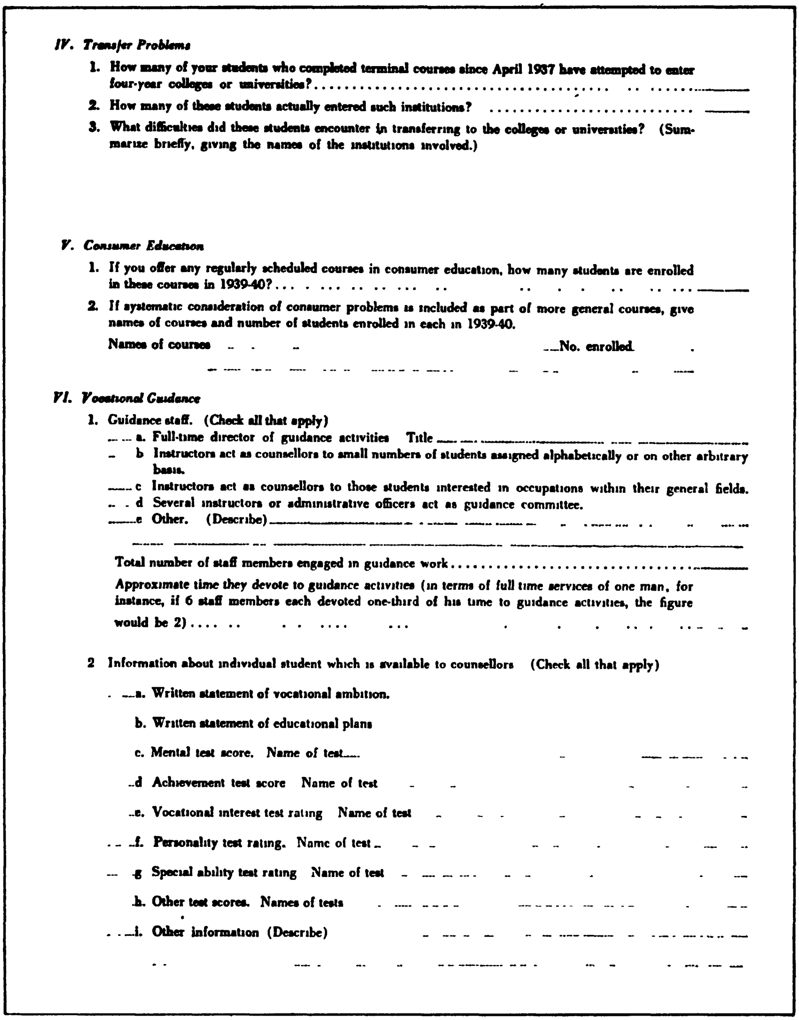
Terminate all formal education before completion of your junior college?..........____%
Transfer to other institutions before completing junior college course?..........____%
Complete their course in your junior college?..........____%

Total.......... 100%

---

* The word "community" is used in this blank in a very broad sense Please interpret it as having to do with the *geographical area* from which most of your students come, whether local, state, regional, or national, if they come from all economic levels; or as having to do with the *class of people* from which they come, if they come from only one or two levels.

FIGURE 28. INFORMATION BLANK (PART A) SENT TO ALL JUNIOR COLLEGES WHICH PROMISED TO COOPERATE IN THE STUDY (4 PAGES)



IV. Transfer Problems

1. How many of your students who completed terminal courses since April 1937 have attempted to enter four-year colleges or universities? .... ______
2. How many of these students actually entered such institutions? .... ______
3. What difficulties did these students encounter in transferring to the colleges or universities? (Summarize briefly, giving the names of the institutions involved.)

V. Consumer Education

1. If you offer any regularly scheduled courses in consumer education, how many students are enrolled in these courses in 1939-40? .... ______
2. If systematic consideration of consumer problems is included as part of more general courses, give names of courses and number of students enrolled in each in 1939-40.

Names of courses ______ No. enrolled ______

VI. Vocational Guidance

1. Guidance staff. (Check all that apply)

___a. Full-time director of guidance activities Title ______

___b Instructors act as counsellors to small numbers of students assigned alphabetically or on other arbitrary basis.

___c Instructors act as counsellors to those students interested in occupations within their general fields.

___d Several instructors or administrative officers act as guidance committee.

___e Other. (Describe) ______

Total number of staff members engaged in guidance work .... ______

Approximate time they devote to guidance activities (in terms of full time services of one man, for instance, if 6 staff members each devoted one-third of his time to guidance activities, the figure would be 2) .... ______

2 Information about individual student which is available to counsellors (Check all that apply)

___a. Written statement of vocational ambition.

___b. Written statement of educational plans

___c. Mental test score. Name of test ______

___d Achievement test score Name of test ______

___e. Vocational interest test rating Name of test ______

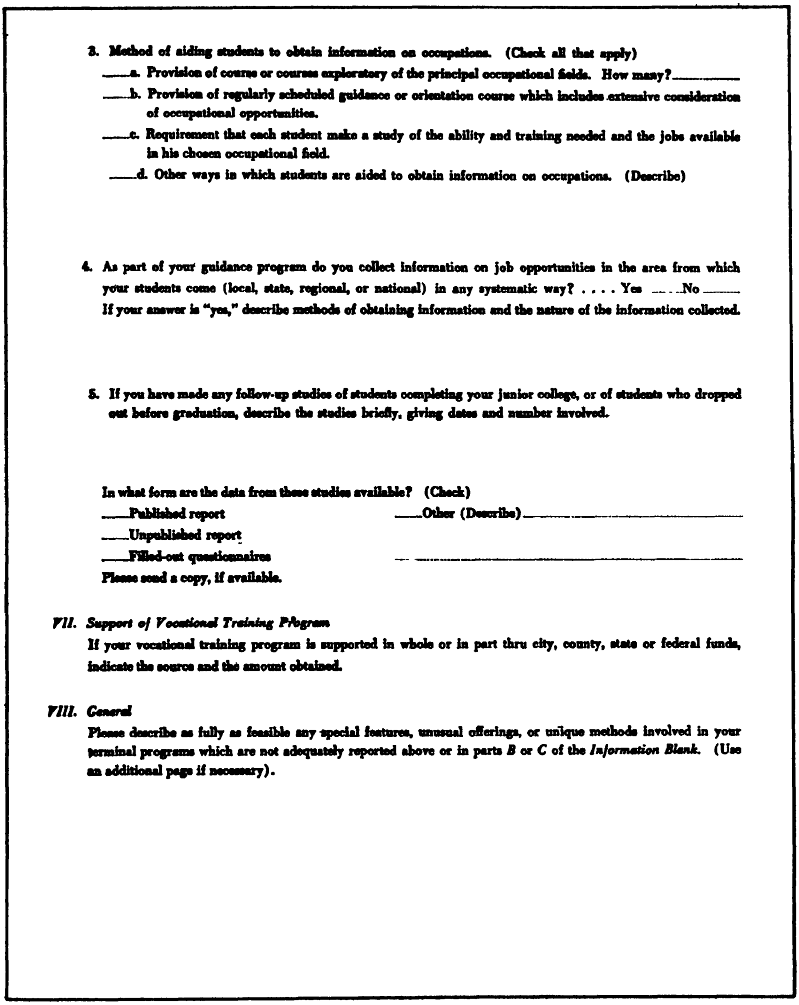
___f. Personality test rating. Name of test ______

___g Special ability test rating Name of test ______

___h. Other test scores. Names of tests ______

___i. Other information (Describe) ______

Figure 28 (*continued*). INFORMATION BLANK (PART A)



3. Method of aiding students to obtain information on occupations. (Check all that apply)

____a. Provision of course or courses exploratory of the principal occupational fields. How many?____

____b. Provision of regularly scheduled guidance or orientation course which includes extensive consideration of occupational opportunities.

____c. Requirement that each student make a study of the ability and training needed and the jobs available in his chosen occupational field.

____d. Other ways in which students are aided to obtain information on occupations. (Describe)

4. As part of your guidance program do you collect information on job opportunities in the area from which your students come (local, state, regional, or national) in any systematic way? . . . . Yes ____ No ____
If your answer is "yes," describe methods of obtaining information and the nature of the information collected.

5. If you have made any follow-up studies of students completing your junior college, or of students who dropped out before graduation, describe the studies briefly, giving dates and number involved.

In what form are the data from these studies available? (Check)

____Published report **____Other (Describe)____**

____Unpublished report

____Filled-out questionnaires ____

Please send a copy, if available.

VII. Support of Vocational Training Program

If your vocational training program is supported in whole or in part thru city, county, state or federal funds, indicate the source and the amount obtained.

VIII. General

Please describe as fully as feasible any special features, unusual offerings, or unique methods involved in your terminal programs which are not adequately reported above or in parts *B* or *C* of the *Information Blank*. (Use an additional page if necessary).

Figure 28 (*continued*). INFORMATION BLANK (PART A)

IX. Outstanding Problems

What are your outstanding problems in connection with terminal education? The problems listed below have been suggested. Indicate which ones are serious problems in your institution and how serious they are by using the following symbols:

A—To indicate the ONE most serious problem of the entire group.
B—To indicate very important problems.
C—To indicate problems of some significance.
____—Leave blank, if of no significance.

Organization

____1. How to develop terminal curricula which will better fit the needs of the community and its students.
____2. Determining what occupations should be classified as semiprofessional.
____3. How to make a community survey and to use its results effectively.
____4. How best to utilize community leaders in the formulation of semiprofessional curricula.
____5. On what basis should the private junior college with a regional or national rather than local clientele determine what terminal curricula it should offer?
____6. How can a small junior college support a suitable range of terminal curricula?

Content

____7. Determining what courses, if any, should be required of all terminal students.
____8. Deciding whether courses of a "trade" character or level should be given in junior college.
____9. How should junior college vocational courses differ from those in high school, e g., in business or home economics?
____10. Should vocational training be primarily of a broad, general nature, or should it be specific, preparing students for immediate employment with little or no apprenticeship?
____11. How much general or cultural education should there be in a semiprofessional curriculum?
____12. How to determine the nature and content of a general core curriculum for "social intelligence."
____13. Modifying content of academic curricula (English, social studies, etc) to meet needs of terminal students.
____14. Should survey courses in social, science, and vocational fields be offered?

Method

____15. How to adapt instruction to the abilities and interests of terminal students.
____16. How to integrate high school and college curricula.
____17. Deciding whether to arrange with industries for programs of part-time cooperative training.
____18. How can suitable textbooks and other teaching aids be obtained?
____19. How to combine practical experiences with classroom teaching.

Guidance

____20. How to determine who should take terminal courses
____21. How to discover student abilities, interests, aptitudes, and needs.
____22. How to interest students in terminal courses
____23 How to convince parents and the community of the value of terminal education.
____24. How to overcome schoolboard indifference to terminal education.
____25. How to integrate high school and junior college guidance programs to secure most suitable enrollment in terminal curricula.
____26. How to organize and develop placement and follow-up service for students in terminal courses

Staff

____27. What training, experience, and personal qualifications should characterize instructors of terminal courses?
____28. Should certification or accreditation requirements be modified for instructors in terminal courses who are well prepared from the vocational standpoint?

Equipment

____29. What specific materials and services should the library offer for semiprofessional courses?
____30. What specific materials and services can the library render to serve general cultural aims?
____31 What housing facilities are needed for specific terminal curricula?
____32. What special technical equipment is needed for specific terminal curricula?

Financial Support

____33. How to secure federal aid for vocational courses
____34 How to secure more adequate state financial aid for terminal programs
____35. Should special fees be charged to help meet expenses for semiprofessional courses?

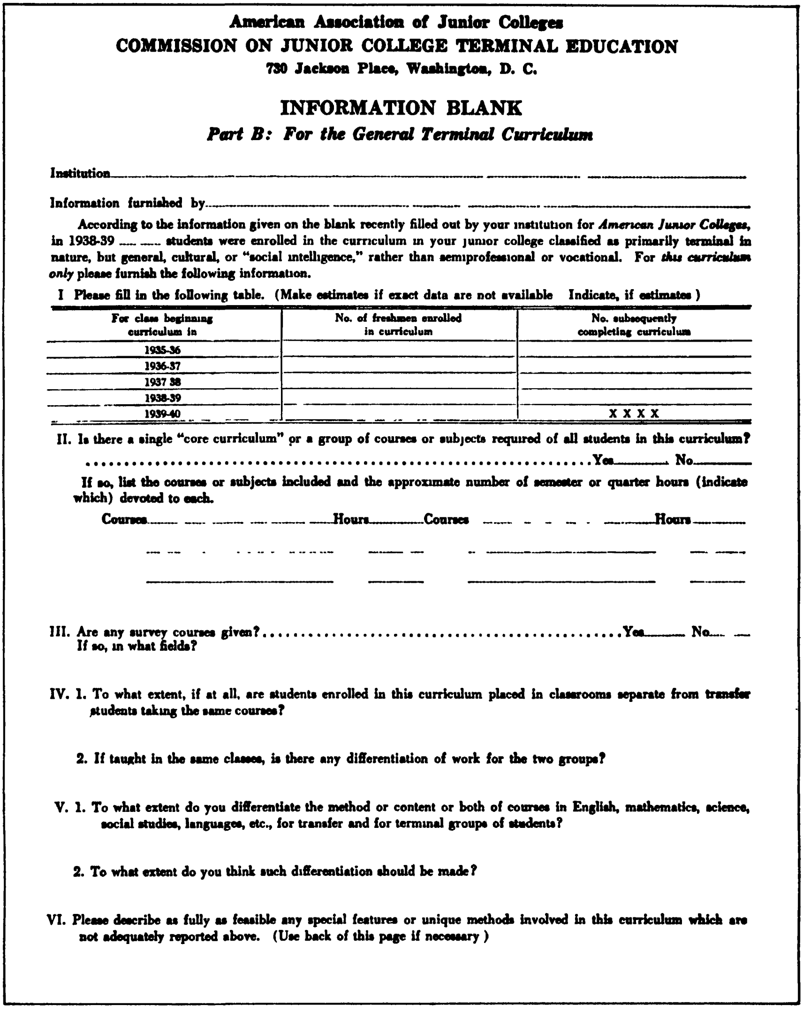
General

____36 How to establish better relations with higher educational institutions
____37. How to determine suitable criteria for evaluation of terminal courses given
____38 Should accreditation agencies take cognizance of terminal curricula?

Others

____39.
____40.

FIGURE 28 (*continued*). INFORMATION BLANK (PART A)



American Association of Junior Colleges
COMMISSION ON JUNIOR COLLEGE TERMINAL EDUCATION
730 Jackson Place, Washington, D. C.

INFORMATION BLANK
Part B: For the General Terminal Curriculum

Institution______________________________

Information furnished by______________________________

According to the information given on the blank recently filled out by your institution for *American Junior Colleges,* in 1938-39 ____ students were enrolled in the curriculum in your junior college classified as primarily terminal in nature, but general, cultural, or "social intelligence," rather than semiprofessional or vocational. For *this curriculum only* please furnish the following information.

I Please fill in the following table. (Make estimates if exact data are not available Indicate, if estimates)

For class beginning curriculum in	No. of freshmen enrolled in curriculum	No. subsequently completing curriculum
1935-36		
1936-37		
1937 38		
1938-39		
1939-40		X X X X

II. Is there a single "core curriculum" or a group of courses or subjects required of all students in this curriculum?
. . . . . Yes_______ No_______

If so, list the courses or subjects included and the approximate number of semester or quarter hours (indicate which) devoted to each.

Courses______________**Hours**_______**Courses**______________**Hours**_______

III. Are any survey courses given? . . . . Yes______ No______
If so, in what fields?

IV. 1. To what extent, if at all, are students enrolled in this curriculum placed in classrooms separate from transfer students taking the same courses?

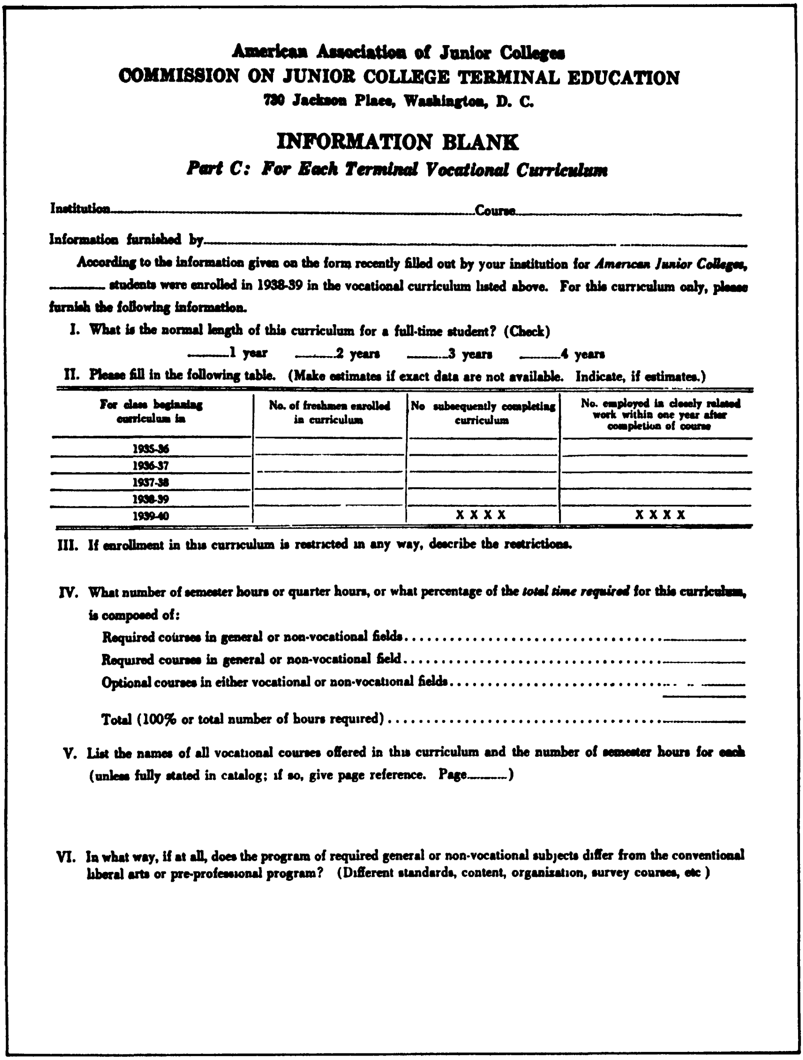
2. If taught in the same classes, is there any differentiation of work for the two groups?

V. 1. To what extent do you differentiate the method or content or both of courses in English, mathematics, science, social studies, languages, etc., for transfer and for terminal groups of students?

2. To what extent do you think such differentiation should be made?

VI. Please describe as fully as feasible any special features or unique methods involved in this curriculum which are not adequately reported above. (Use back of this page if necessary)

Figure 29. Information Blank (Part B) Sent to All Institutions Reporting in *American Junior Colleges* A General Terminal Curriculum



American Association of Junior Colleges
COMMISSION ON JUNIOR COLLEGE TERMINAL EDUCATION
730 Jackson Place, Washington, D. C.

INFORMATION BLANK

Part C: For Each Terminal Vocational Curriculum

Institution..**Course**..............................

Information furnished by..

According to the information given on the form recently filled out by your institution for *American Junior Colleges*, ________ students were enrolled in 1938-39 in the vocational curriculum listed above. For this curriculum only, please furnish the following information.

I. What is the normal length of this curriculum for a full-time student? (Check)

______1 year ______2 years ______3 years ______4 years

II. Please fill in the following table. (Make estimates if exact data are not available. Indicate, if estimates.)

For class beginning curriculum in	No. of freshmen enrolled in curriculum	No subsequently completing curriculum	No. employed in closely related work within one year after completion of course
1935-36			
1936-37			
1937-38			
1938-39			
1939-40		X X X X	X X X X

III. If enrollment in this curriculum is restricted in any way, describe the restrictions.

IV. What number of semester hours or quarter hours, or what percentage of the *total time required* for this curriculum, is composed of:

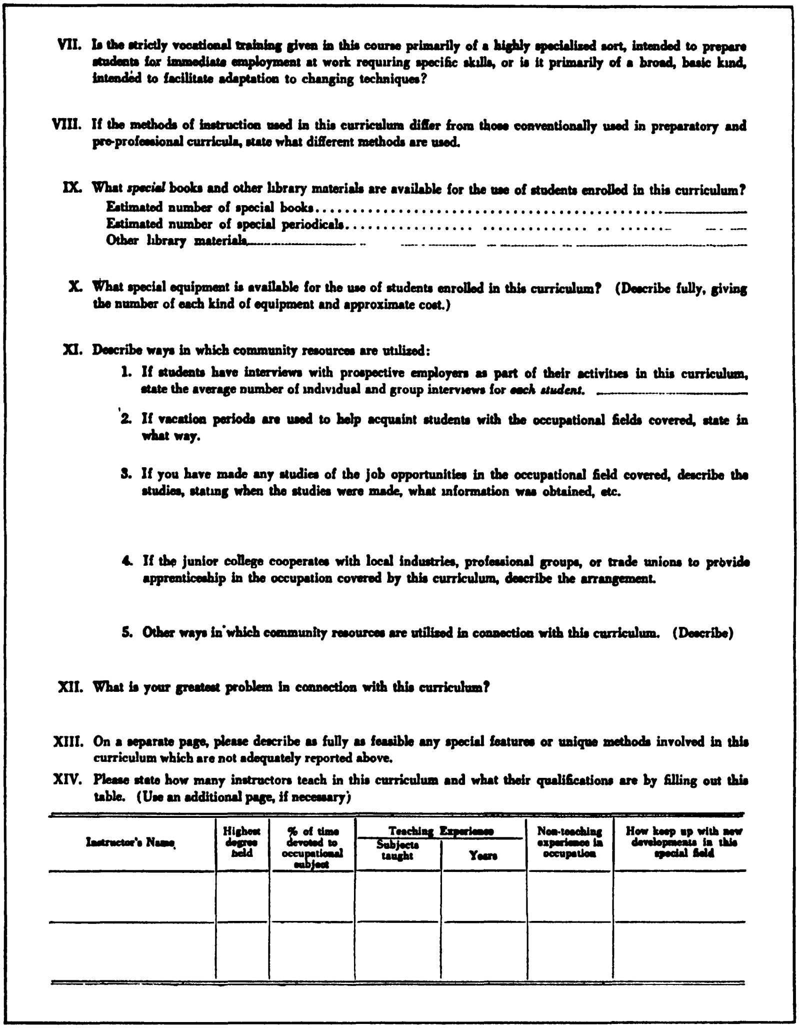
Required courses in general or non-vocational fields..............................________
Required courses in general or non-vocational field..............................________
Optional courses in either vocational or non-vocational fields..............................________

Total (100% or total number of hours required)..............................________

V. List the names of all vocational courses offered in this curriculum and the number of semester hours for each (unless fully stated in catalog; if so, give page reference. Page______)

VI. In what way, if at all, does the program of required general or non-vocational subjects differ from the conventional liberal arts or pre-professional program? (Different standards, content, organization, survey courses, etc.)

Figure 30. Information Blank (Part C) Sent to All Institutions Reporting in *American Junior Colleges* Terminal Vocational Curricula (One Copy for Each Curriculum)



VII. Is the strictly vocational training given in this course primarily of a highly specialized sort, intended to prepare students for immediate employment at work requiring specific skills, or is it primarily of a broad, basic kind, intended to facilitate adaptation to changing techniques?

VIII. If the methods of instruction used in this curriculum differ from those conventionally used in preparatory and pre-professional curricula, state what different methods are used.

IX. What *special* books and other library materials are available for the use of students enrolled in this curriculum?
Estimated number of special books..________
Estimated number of special periodicals................. ....______
Other library materials____

X. What special equipment is available for the use of students enrolled in this curriculum? (Describe fully, giving the number of each kind of equipment and approximate cost.)

XI. Describe ways in which community resources are utilized:

1. If students have interviews with prospective employers as part of their activities in this curriculum, state the average number of individual and group interviews for *each student.* ________________
2. If vacation periods are used to help acquaint students with the occupational fields covered, state in what way.
3. If you have made any studies of the job opportunities in the occupational field covered, describe the studies, stating when the studies were made, what information was obtained, etc.
4. If the junior college cooperates with local industries, professional groups, or trade unions to provide apprenticeship in the occupation covered by this curriculum, describe the arrangement.
5. Other ways in which community resources are utilized in connection with this curriculum. (Describe)

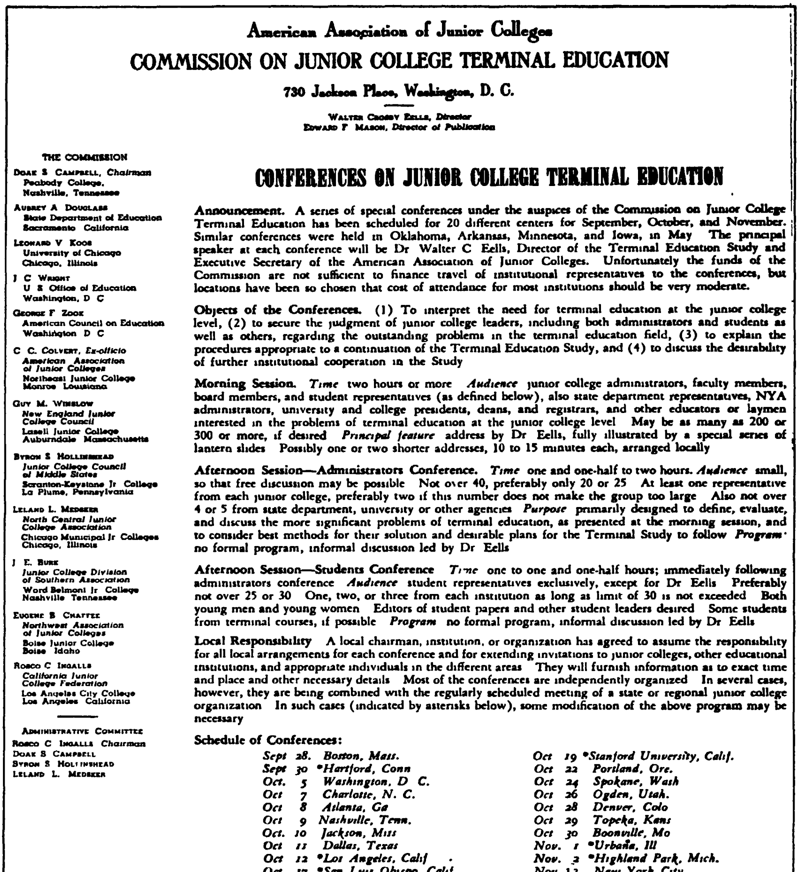
XII. What is your greatest problem in connection with this curriculum?

XIII. On a separate page, please describe as fully as feasible any special features or unique methods involved in this curriculum which are not adequately reported above.

XIV. Please state how many instructors teach in this curriculum and what their qualifications are by filling out this table. (Use an additional page, if necessary)

Instructor's Name	Highest degree held	% of time devoted to occupational subject	Teaching Experience		Non-teaching experience in occupation	How keep up with new developments in this special field
			Subjects taught	Years		

Figure 30 (*continued*). INFORMATION BLANK (PART C)



American Association of Junior Colleges

COMMISSION ON JUNIOR COLLEGE TERMINAL EDUCATION

730 Jackson Place, Washington, D. C.

WALTER CROSBY EELLS, *Director*
EDWARD F MASON, *Director of Publication*

THE COMMISSION

DOAK S CAMPBELL, *Chairman*
Peabody College,
Nashville, Tennessee

AUBREY A DOUGLASS
State Department of Education
Sacramento California

LEONARD V KOOS
University of Chicago
Chicago, Illinois

J C WRIGHT
U S Office of Education
Washington, D C

GEORGE F ZOOK
American Council on Education
Washington D C

C C. COLVERT, *Ex-officio*
American Association of Junior Colleges
Northeast Junior College
Monroe Louisiana

GUY M. WINSLOW
New England Junior College Council
Lasell Junior College
Auburndale Massachusetts

BYRON S HOLLINSHEAD
Junior College Council of Middle States
Scranton-Keystone Jr College
La Plume, Pennsylvania

LELAND L. MEDSKER
North Central Junior College Association
Chicago Municipal Jr Colleges
Chicago, Illinois

J E. BURK
Junior College Division of Southern Association
Ward Belmont Jr College
Nashville Tennessee

EUGENE B CHAFFEE
Northwest Association of Junior Colleges
Boise Junior College
Boise Idaho

ROSCO C INGALLS
California Junior College Federation
Los Angeles City College
Los Angeles California

ADMINISTRATIVE COMMITTEE
ROSCO C INGALLS *Chairman*
DOAK S CAMPBELL
BYRON S HOLLINSHEAD
LELAND L. MEDSKER

CONFERENCES ON JUNIOR COLLEGE TERMINAL EDUCATION

Announcement. A series of special conferences under the auspices of the Commission on Junior College Terminal Education has been scheduled for 20 different centers for September, October, and November. Similar conferences were held in Oklahoma, Arkansas, Minnesota, and Iowa, in May The principal speaker at each conference will be Dr Walter C Eells, Director of the Terminal Education Study and Executive Secretary of the American Association of Junior Colleges. Unfortunately the funds of the Commission are not sufficient to finance travel of institutional representatives to the conferences, but locations have been so chosen that cost of attendance for most institutions should be very moderate.

Objects of the Conferences. (1) To interpret the need for terminal education at the junior college level, (2) to secure the judgment of junior college leaders, including both administrators and students as well as others, regarding the outstanding problems in the terminal education field, (3) to explain the procedures appropriate to a continuation of the Terminal Education Study, and (4) to discuss the desirability of further institutional cooperation in the Study

Morning Session. *Time* two hours or more *Audience* junior college administrators, faculty members, board members, and student representatives (as defined below), also state department representatives, NYA administrators, university and college presidents, deans, and registrars, and other educators or laymen interested in the problems of terminal education at the junior college level May be as many as 200 or 300 or more, if desired *Principal feature* address by Dr Eells, fully illustrated by a special series of lantern slides Possibly one or two shorter addresses, 10 to 15 minutes each, arranged locally

Afternoon Session—Administrators Conference. *Time* one and one-half to two hours. *Audience* small, so that free discussion may be possible Not over 40, preferably only 20 or 25 At least one representative from each junior college, preferably two if this number does not make the group too large Also not over 4 or 5 from state department, university or other agencies *Purpose* primarily designed to define, evaluate, and discuss the more significant problems of terminal education, as presented at the morning session, and to consider best methods for their solution and desirable plans for the Terminal Study to follow *Program*· no formal program, informal discussion led by Dr Eells

Afternoon Session—Students Conference *Time* one to one and one-half hours; immediately following administrators conference *Audience* student representatives exclusively, except for Dr Eells Preferably not over 25 or 30 One, two, or three from each institution as long as limit of 30 is not exceeded Both young men and young women Editors of student papers and other student leaders desired Some students from terminal courses, if possible *Program* no formal program, informal discussion led by Dr Eells

Local Responsibility A local chairman, institution, or organization has agreed to assume the responsibility for all local arrangements for each conference and for extending invitations to junior colleges, other educational institutions, and appropriate individuals in the different areas They will furnish information as to exact time and place and other necessary details Most of the conferences are independently organized In several cases, however, they are being combined with the regularly scheduled meeting of a state or regional junior college organization In such cases (indicated by asterisks below), some modification of the above program may be necessary

Schedule of Conferences:

Sept 28. Boston, Mass.
*Sept 30 *Hartford, Conn*
Oct. 5 Washington, D C.
Oct 7 Charlotte, N. C.
Oct 8 Atlanta, Ga
Oct 9 Nashville, Tenn.
Oct. 10 Jackson, Miss
Oct 11 Dallas, Texas
*Oct 12 *Los Angeles, Calif*
*Oct. 17 *San Luis Obispo, Calif.*
*Oct 19 *Stanford University, Calif.*
Oct 22 Portland, Ore.
Oct 24 Spokane, Wash
Oct 26 Ogden, Utah.
Oct 28 Denver, Colo
Oct 29 Topeka, Kans
Oct 30 Boonville, Mo
*Nov. 1 *Urbana, Ill*
*Nov. 2 *Highland Park, Mich.*
Nov. 13 New York City.

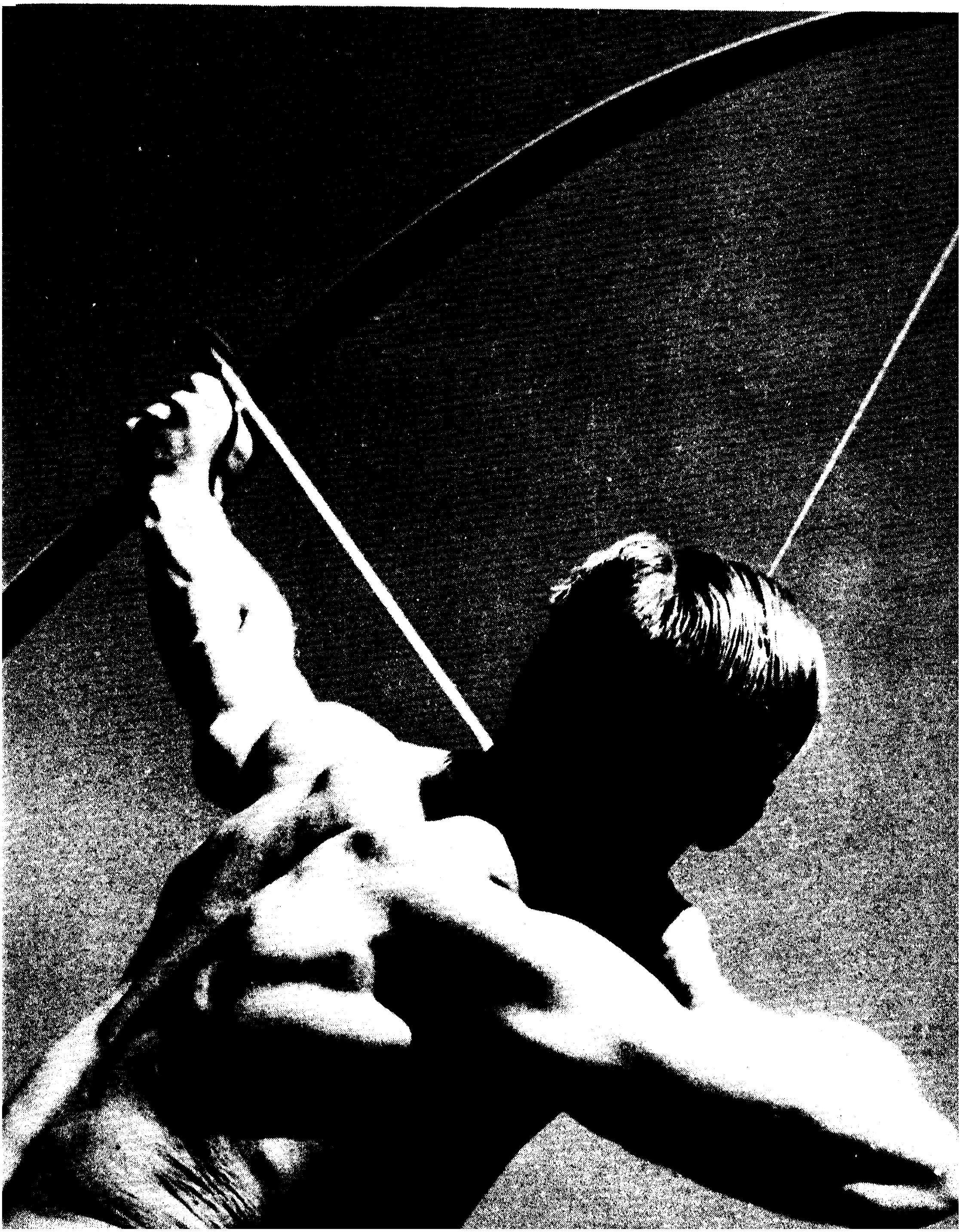
Figure 31. INFORMATION BLANK CONCERNING STATE AND REGIONAL CONFERENCES

Photograph reproduced on opposite page furnished by Los Angeles City College.

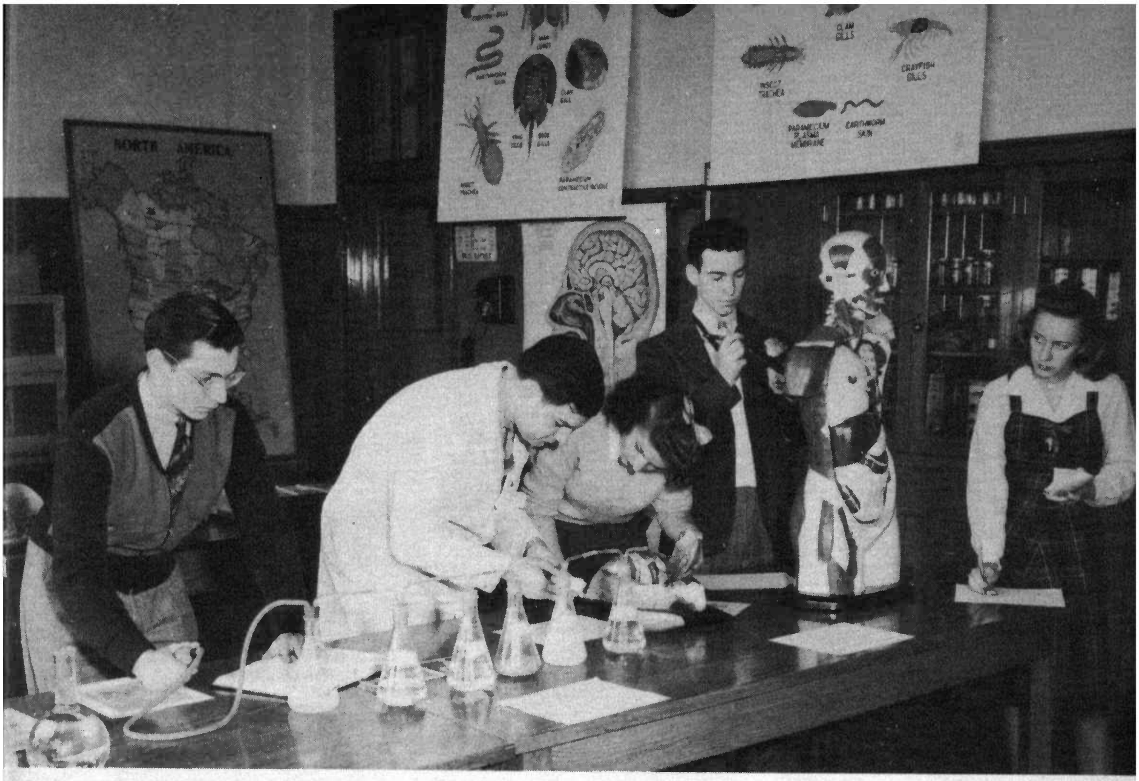
AIMS of TERMINAL EDUCATION

AS ILLUSTRATED BY PICTURES OF TYPICAL ACTIVITIES

Selected and arranged by Edward F. Mason

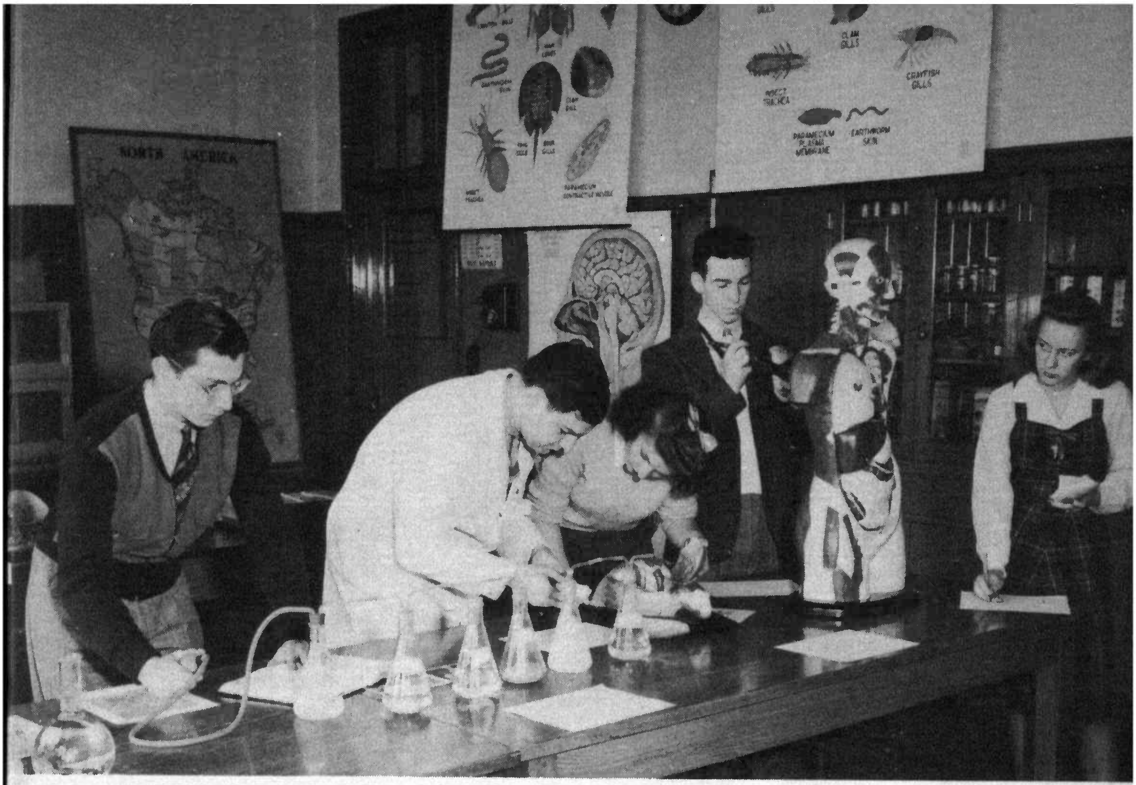


Cultural Arts. Appreciation of the beautiful, as its origins and history are traceable in the growth of world civilization, is the field of a two-year sequence in general education at Los Angeles City College. Occidental and oriental cultures are interpreted. World poetry, design, European and Spanish-American civilizations are studied.



General Education. Survey courses in biological sciences (above) and in physical sciences (below) have their laboratory-museums at Wright Junior College, Chicago. Above: study of respiration. Below: a laboratory geyser.

Cultural Arts. Appreciation of the beautiful, as its origins and history are traceable in the growth of world civilization, is the field of a two-year sequence in general education at Los Angeles City College. Occidental and oriental cultures are interpreted. World poetry, design, European and Spanish-American civilizations are studied.



General Education. Survey courses in biological sciences (above) and in physical sciences (below) have their laboratory-museums at Wright Junior College, Chicago. Above: study of respiration. Below: a laboratory geyser.

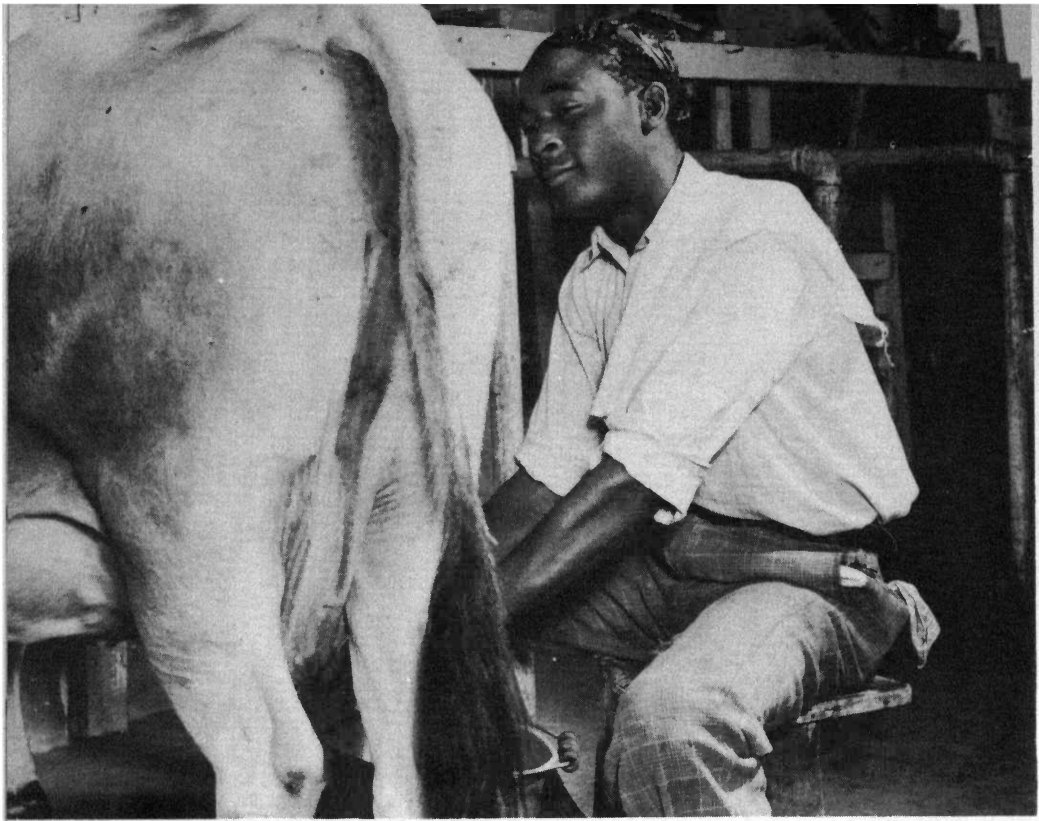
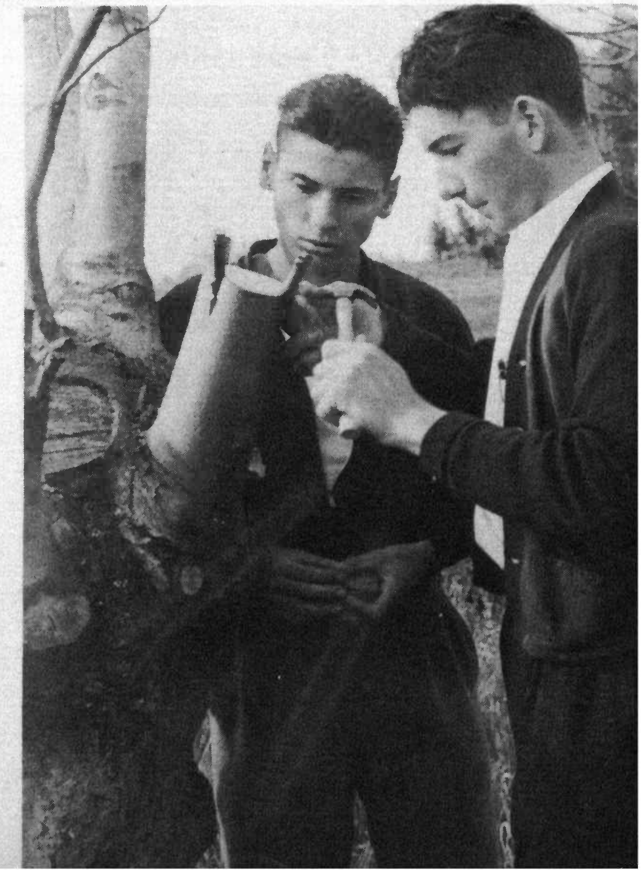


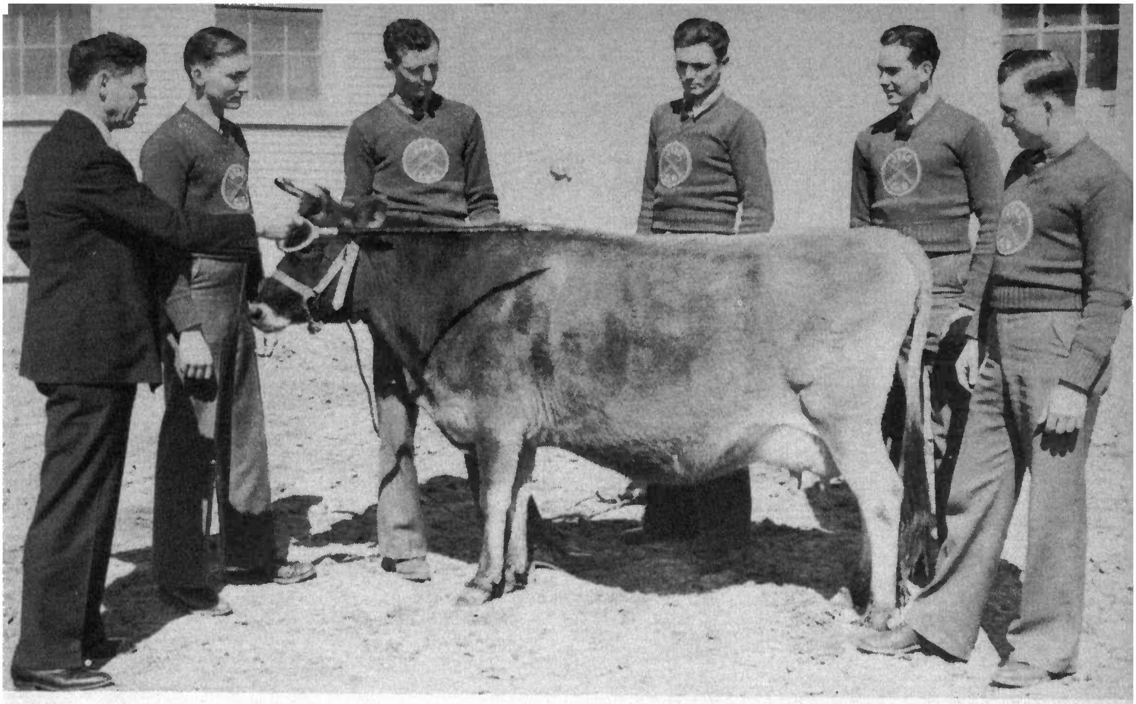
Photo by Kenneth Heilbron

Agriculture. A student at Bethune-Cookman College, Florida (above), learns dairy husbandry while he works. Grafting a tree (right) are two students at Modesto Junior College, California. Agriculture in all its branches lends itself well to junior college terminal study.

Among terminal agricultural courses offered at Modesto are crop production, agricultural economics, gardening, animal husbandry, dairy production, horticulture, and various continuations and applications of these subjects to the needs of students who must soon earn their livings in farm vocations.



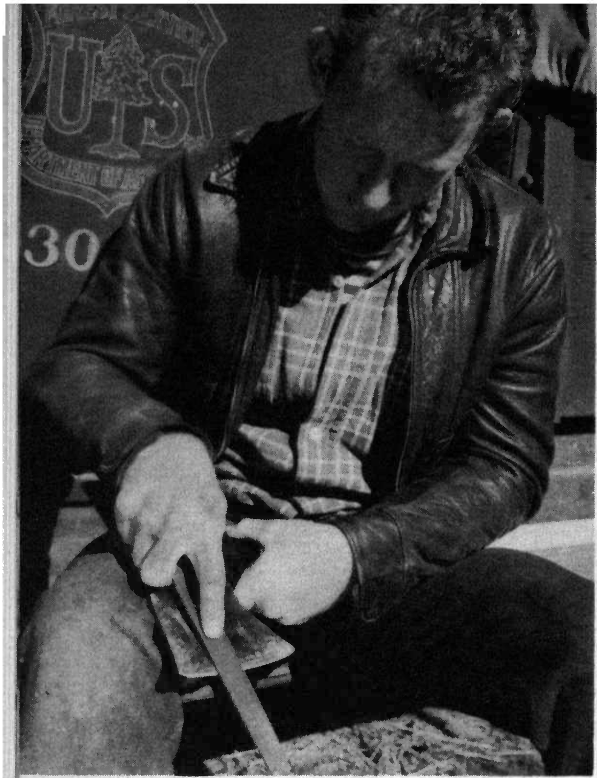
T. Sheek Studio

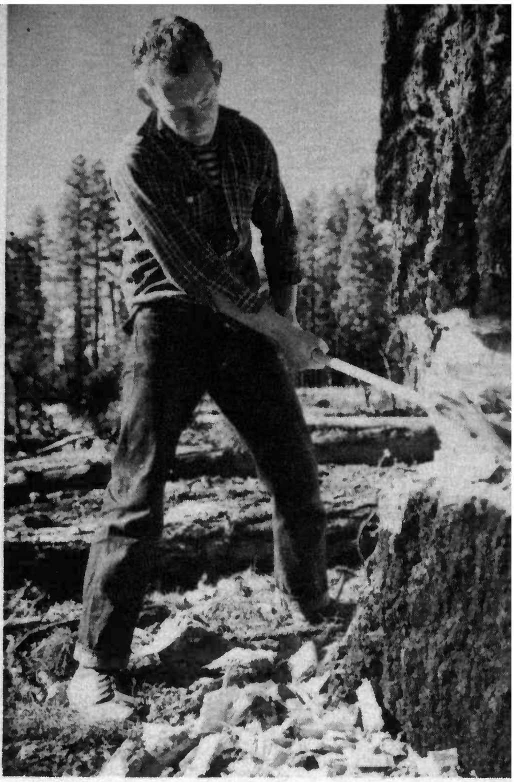


Agriculture. This stock judging team of John Tarleton Agricultural College, Texas, shown above, with the instructor, won the junior college national championship.

Floriculture. Retail flower shop management (below) is included in the course in floriculture at San Francisco Junior College, along with instruction in nursery practice and care of the garden.

Gabriel Moulin Photo





Forestry. When students of Lassen Junior College, Susanville, California, work at their course in forestry and lumbering, they **work.** Here are four steps in the fire-hazard reduction program conducted by the college in cooperation with the Lassen National Forest: Upper left: "Red" Chamlee puts a keen edge on his ax, in preparation for the attack. Upper right: A workman is known by his chips; "Red' puts in the undercut on a white fir sna that is to be felled. Lower left: Th felling crew in action. Lower right "Bucking up" timber to be remove from the forest.

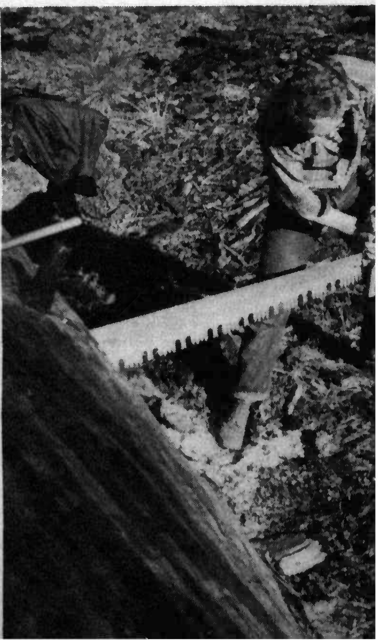


Photo by Ayres

Business Administration. A sophomore in business administration at Hillyer Junior College, Connecticut, increases her transcription speed by taking dictation from the head of the department. Under the cooperative system she works eight weeks for an insurance company, then studies eight weeks at the college, expecting to develop her skills as a secretary.

Business Receptionist. PBX (switchboard) practice gives this student at Colorado Woman's College, Denver, some of the finishing touches to her training as a business office receptionist. The course stresses personality training, including a "personality clinic" in which she hears her own voice from a recording, and sees herself walk, talk, sit, and stand, in motion picture. A complete personality record is made up for her, including profiles, personality scores, etiquette tests, and survey sheets on conversation, voice, dress, make-up, and health.

Photo by Vernon W. Taylor

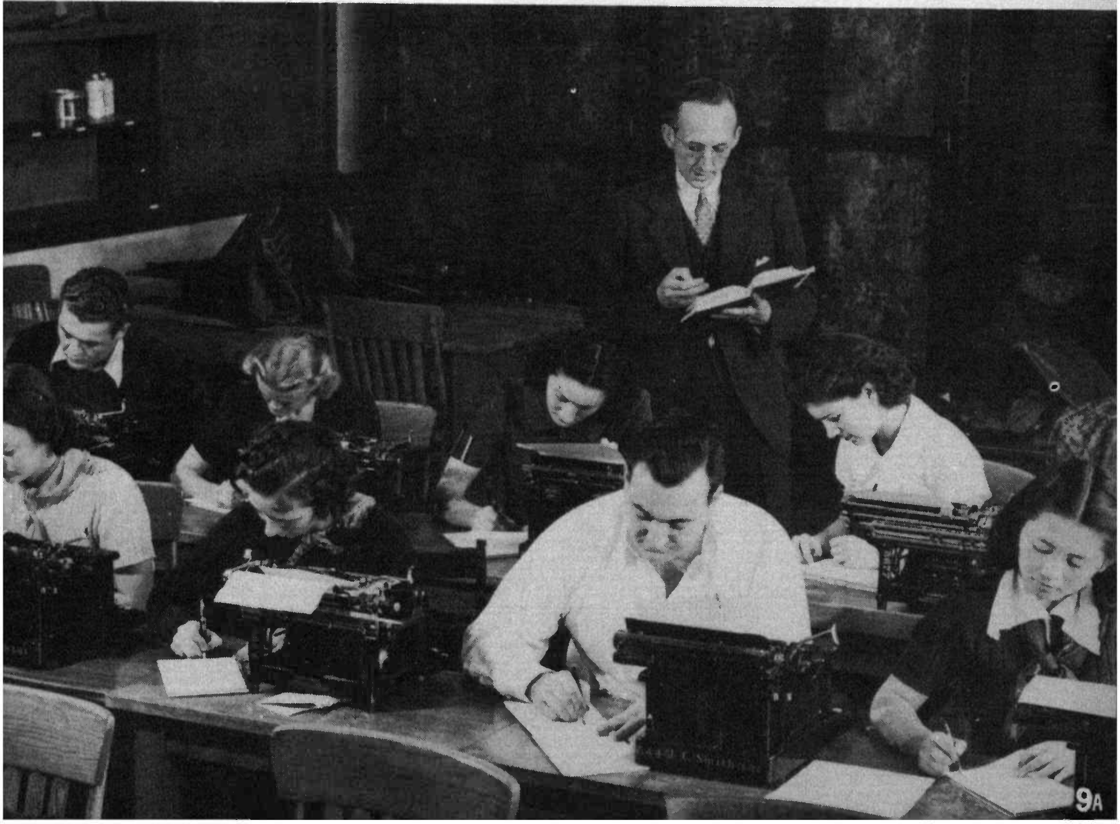
Secretarial. Above, students in a corner of the business education laboratory at Mars Hill College, North Carolina. Shorthand, typewriting, accounting, salesmanship and advertising, banking and office practice are taught.

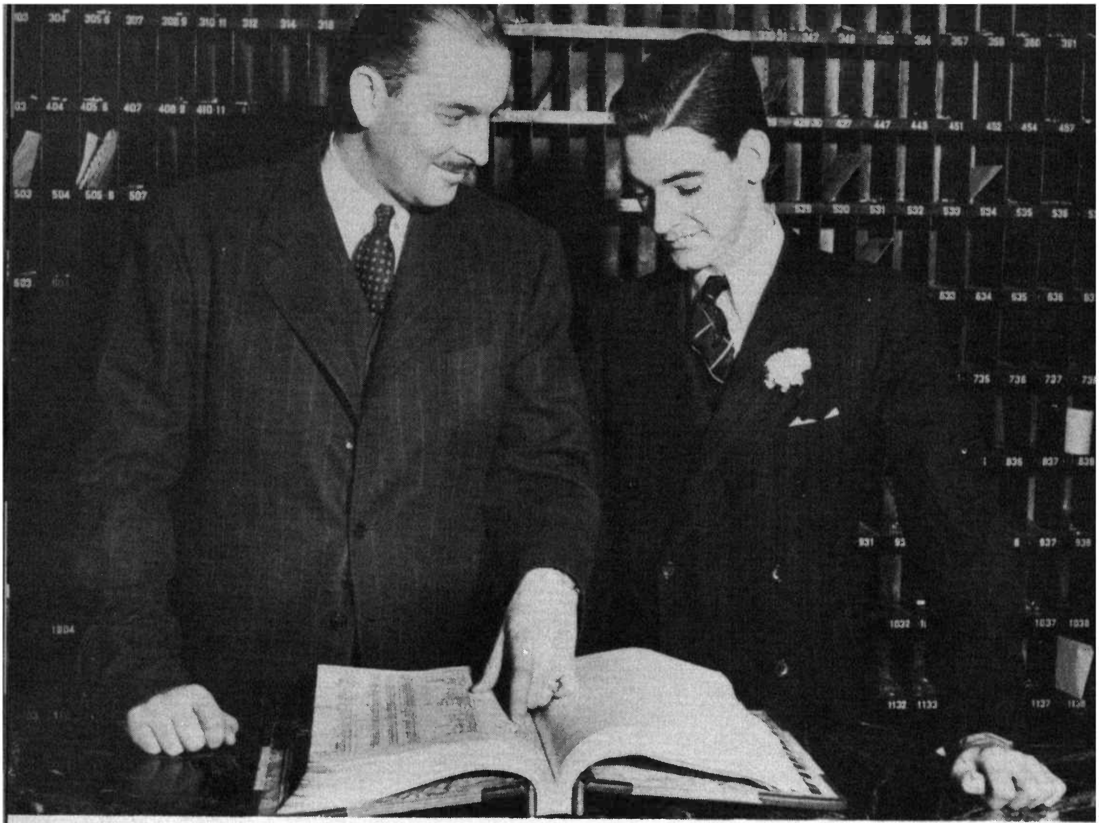
Below, a student of Colorado Woman's College, Denver, interviews an employer. Confidence and personal appearance are paramount in the course.

Photo by Vernon W. Taylor

Secretarial. A student at Stoneleigh College, Rye, N. H., runs the mimeograph. Shorthand, typing, use of adding and calculating machines are part of course. Below, student secretaries at Los Angeles City College take dictation in preparation for transcription. The demand for good men stenographers is greater than the supply, and few fields offer better opportunities.

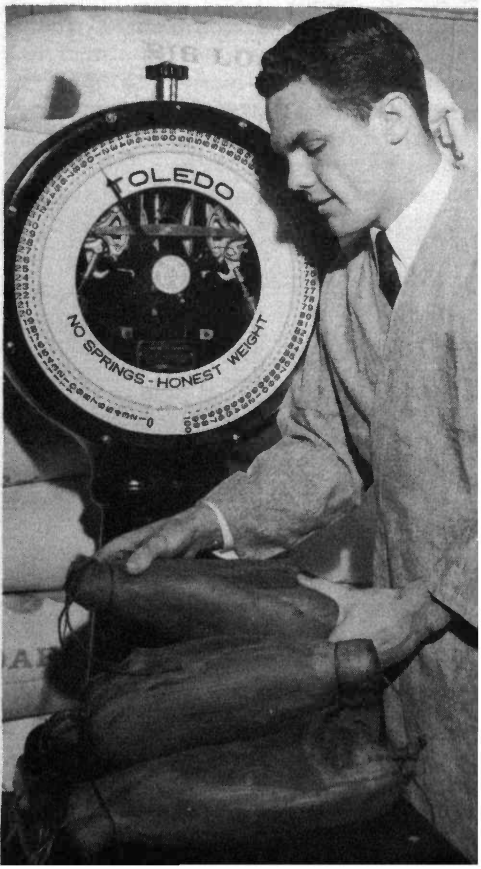
Photo by Alajos Schuszler



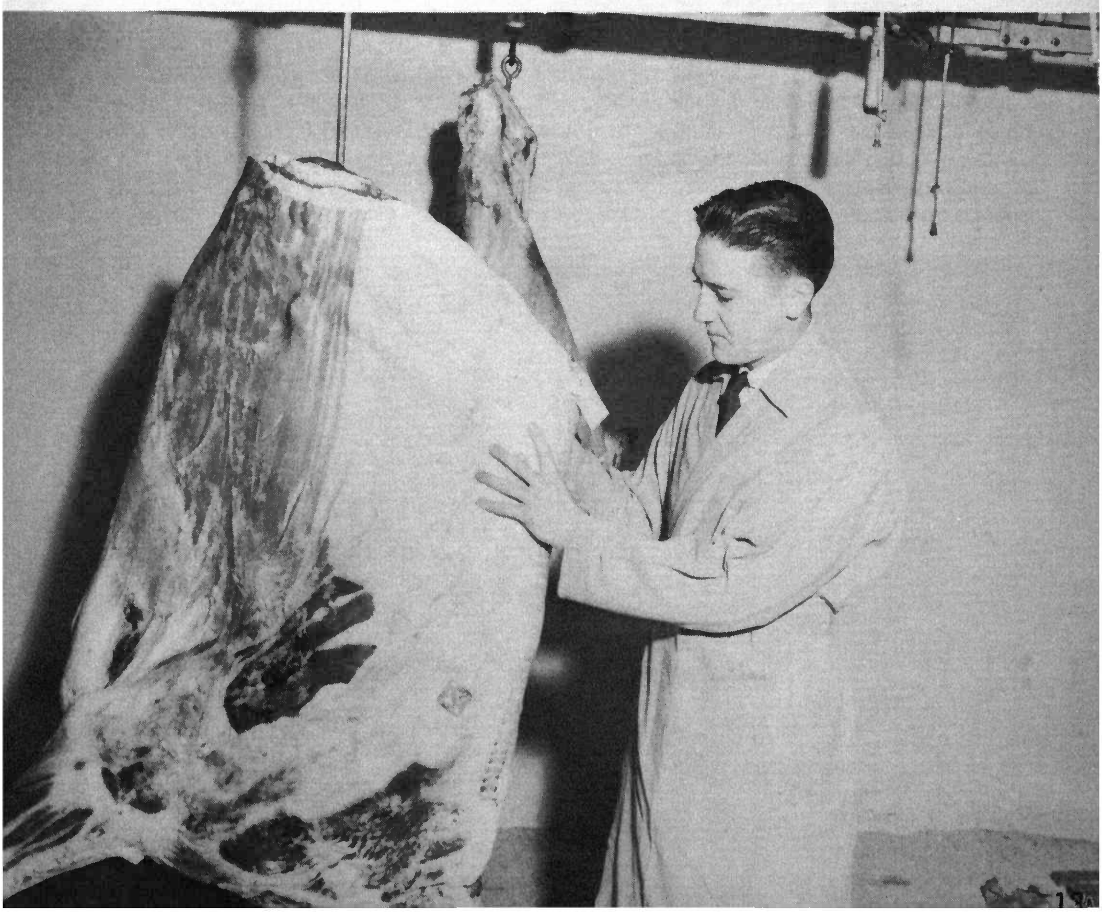


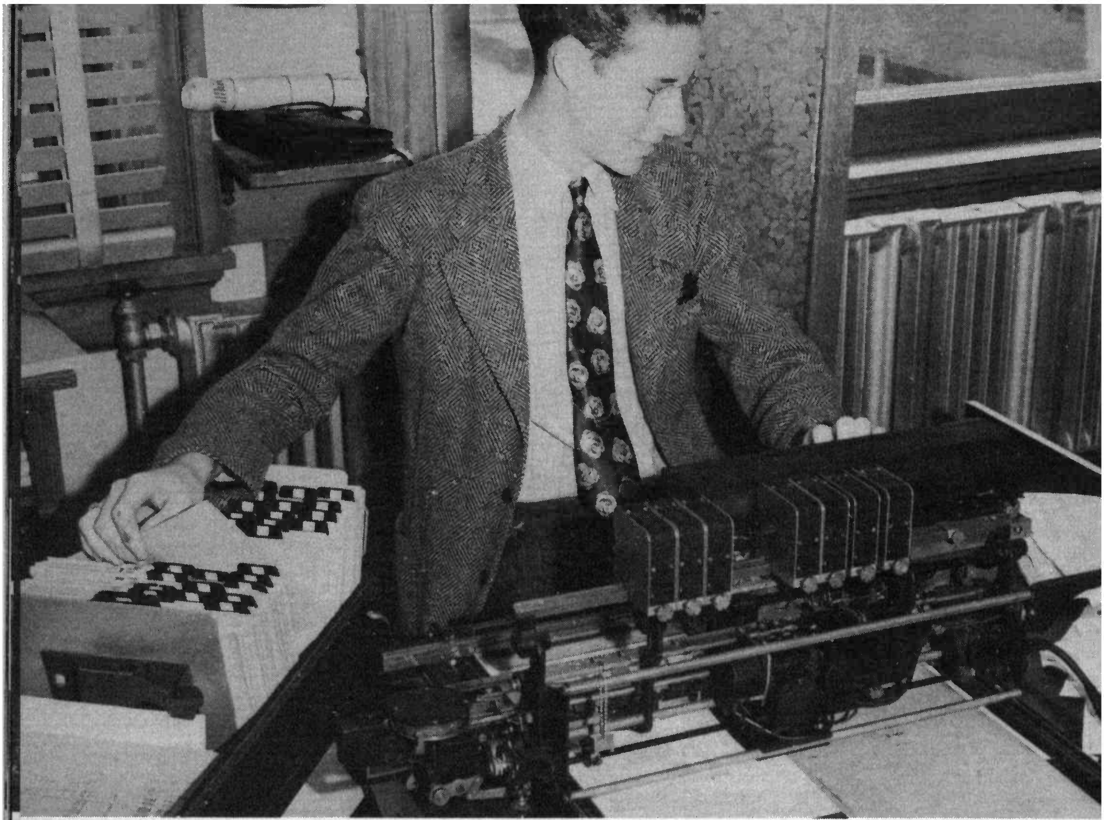
A. Sponagel Photo

Hotel and Restaurant Management. The manager of a famous San Francisco hotel gives personal instruction at the front office desk to a student from the hotel division of San Francisco Junior College. Below, a senior student is shown in the store room of the same hostelry, where he practices principles of store room management taught by the purchasing agent. Each spring, fourth semester students have 10 weeks of experience in actual work in the largest hotels of San Francisco. The hotel and restaurant industry of the city has given notable cooperation in this vocational training program of the junior college, not only in providing training facilities, but in surveying the needs and possibilities for such a course and in facilitating the employment of graduates. Organized labor also cooperates in the community surveys and in arrangements by which this industry and others in the city are served through junior college courses.



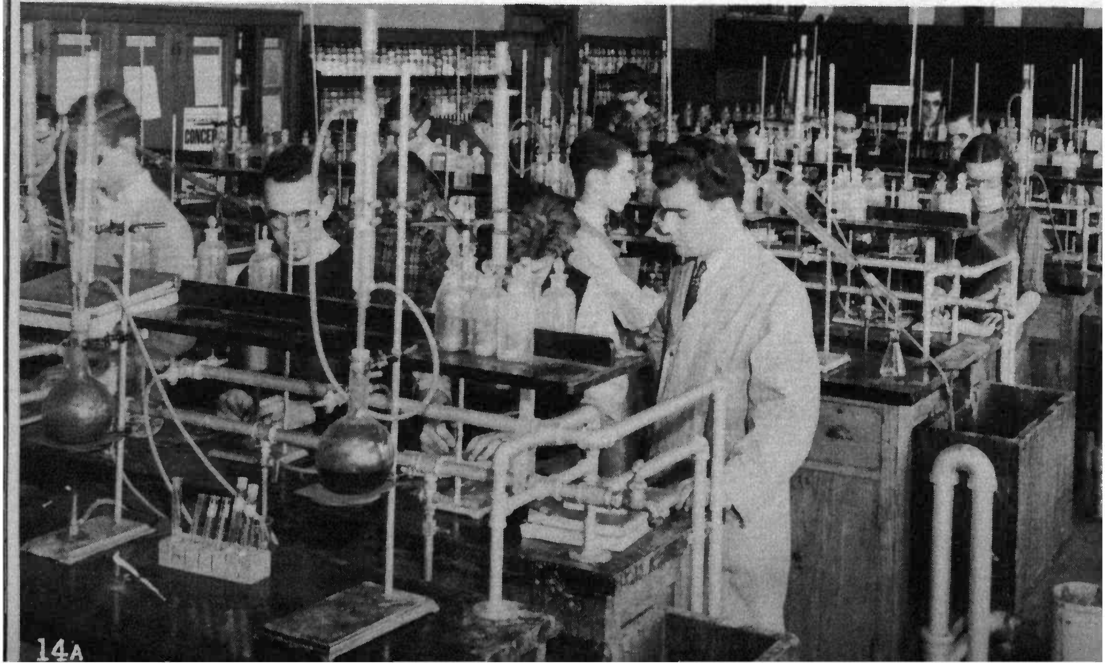
Hotel and Restaurant Management. Salads brought jobs to these three San Francisco students. One is now employed by the college, one by a high school cafeteria, one by a restaurant chain. Below, learning meat cutting.

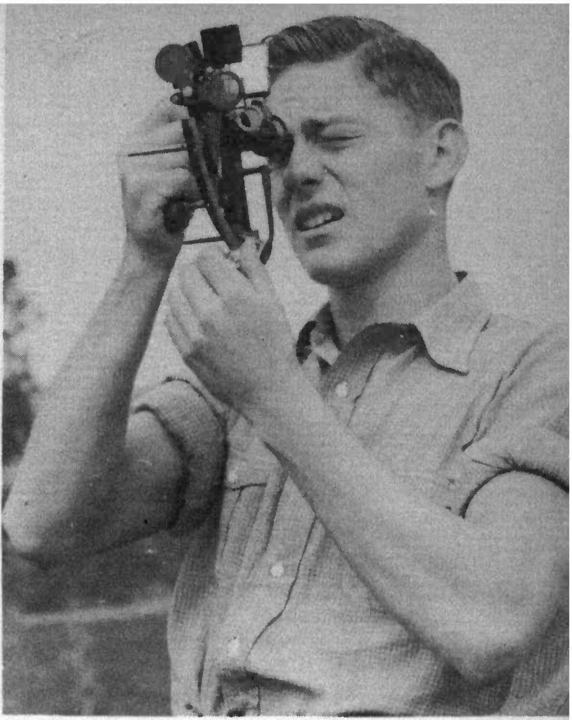




Accounting is an important terminal business course in many junior colleges. Here a student at Long Beach Junior College, California, puts his knowledge of machine bookkeeping to work as he posts accounts in a Long Beach store.

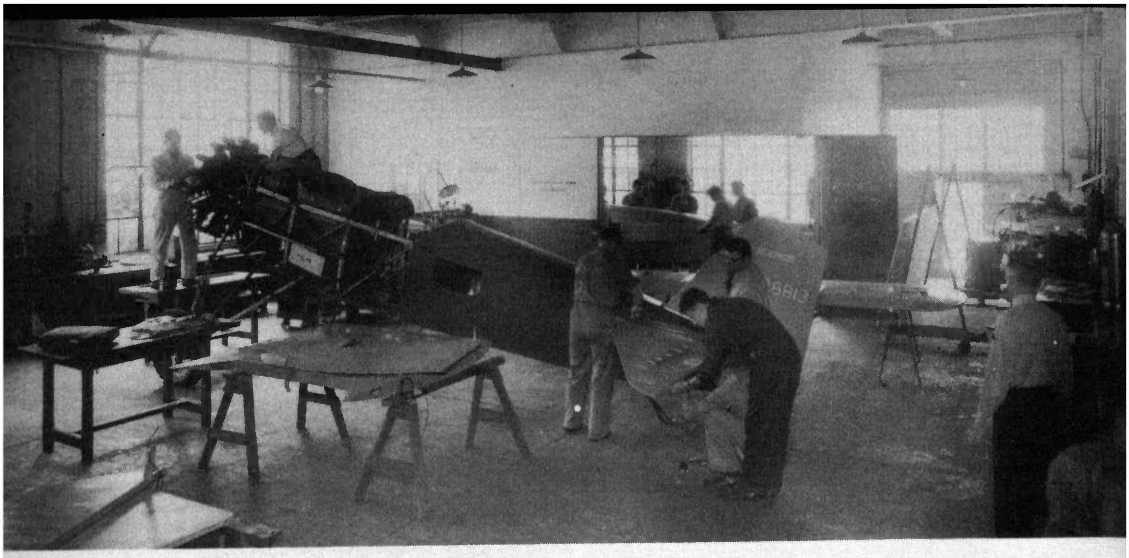
Chemical Engineering is a termina course at Wright Junior College, Chi cago, where this laboratory group is class in organic chemistry. Protectiv glasses are worn as students perform a experiment in the synthesis of analine





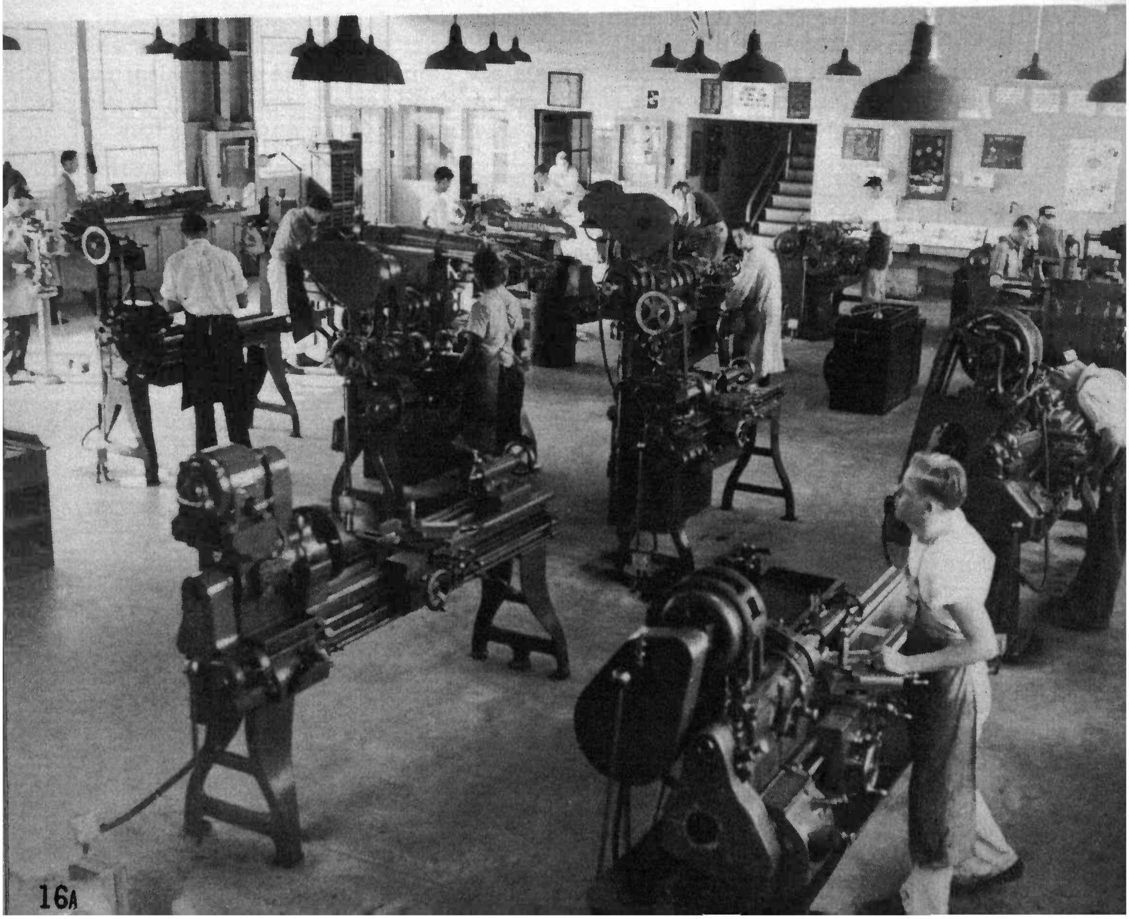
General Engineering. A student at Glendale Junior College, California, gets his bearings by use of the sextant. Work in plane surveying includes the measurement of distances by pacing, chaining, and the use of the compass or Brunton transit, the use and adjustment of levels, transits, plane tables, sextants, planimeters and drafting machines, the measurement of angles, methods of mapping, topography, estimating quantities, computing notes for vertical, simple, and compound curves. Other courses are instrumental drawing, machine drawing, slide rule and computation, graphic analysis, drafting, physics, and mathematics.

Air Conditioning. The problem in air conditioning on which this student (below) is working is typical of projects that comprise much of the technical work at Cogswell Polytechnic College, San Francisco. All necessary departments of the college cooperate on any given project. The drafting department makes preliminary sketches, followed by definite designs, then by scale pencil tracings, and finally by working prints. Using these prints, each shop department begins the work belonging to it, which is subject to inspection by students of other departments. When all parts are completed, the mechanism is assembled and tested, under scrutiny of participating students and instructors.

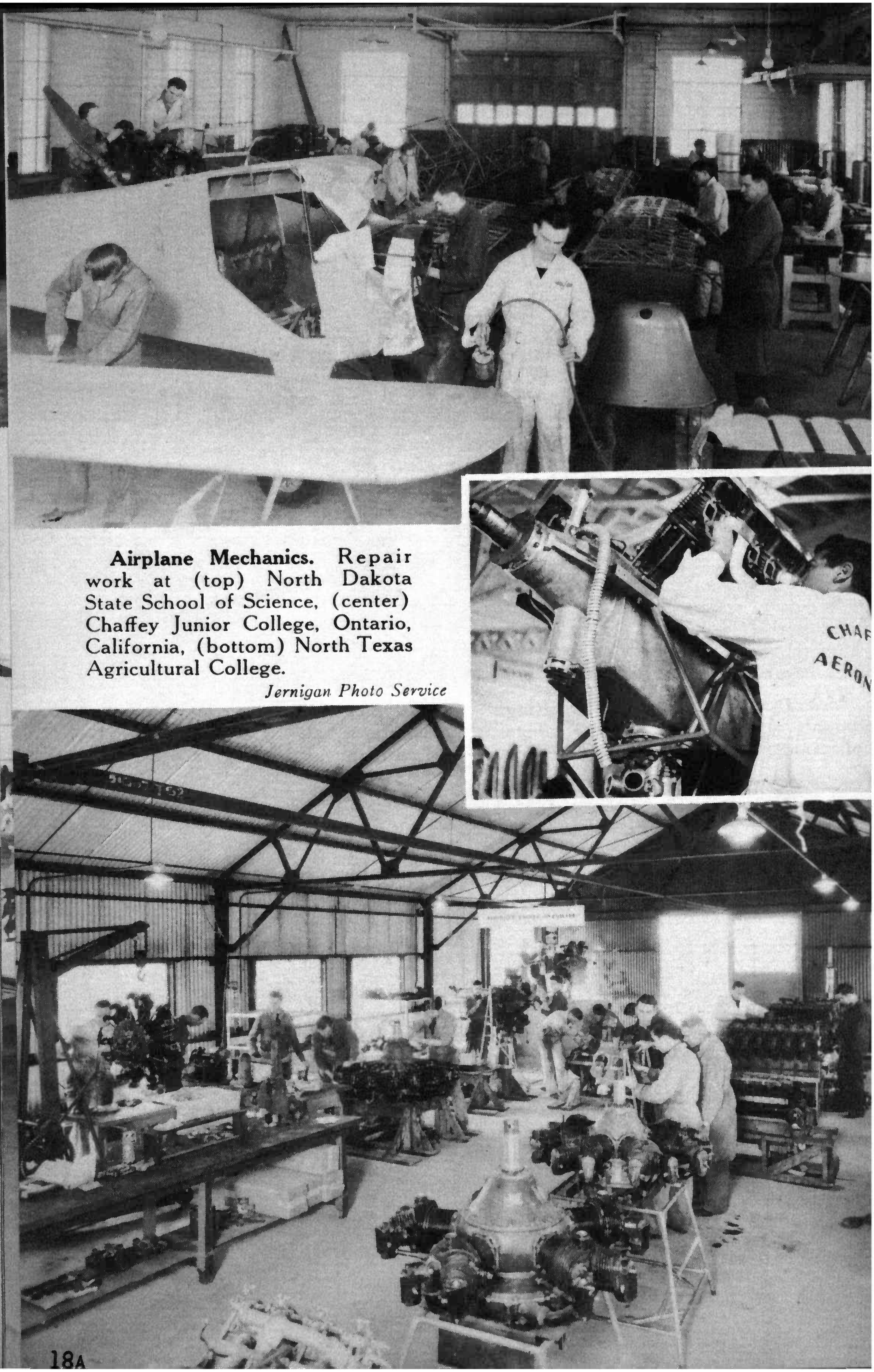


Aircraft Repair and Engineering. Students at North Texas Agricultural College (above) complete the overhaul of an airplane motor and repair of the ship itself. Two wings on this ship had been demolished and had to be rebuilt. All of the ship was recovered. Instruction includes hand and machine sewing, seam work, fabric covers, dope application, lacquer work, sheet metal and sheet tube work, assembly and rigging, wooden units, dies, and welding.

Below, a section of the machine shop of Compton Junior College, California, where important aid is given the national air defense program. The college aeronautics building is like an aircraft factory.



Aircraft Construction and Drafting. Students at Compton Junior College, California (above) are engaged in metal aircraft construction, important for defense. Below is a Compton class in aeronautical drafting.



Airplane Mechanics. Repair work at (top) North Dakota State School of Science, (center) Chaffey Junior College, Ontario, California, (bottom) North Texas Agricultural College.

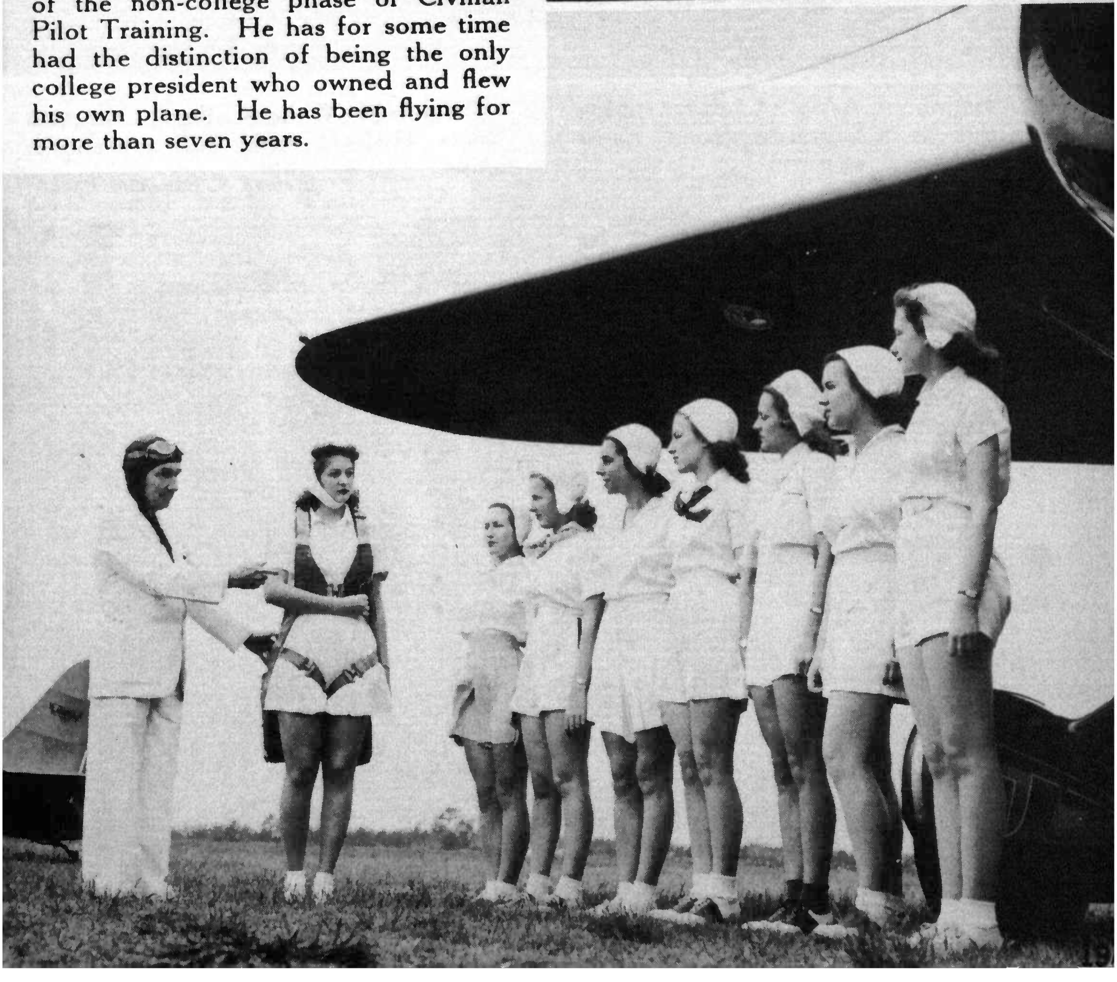
Jernigan Photo Service

Aviation. Southern belles learn the uses of the adjustable propeller (above) and the parachute (below) from aviator-President Richard G. Cox of Gulf Park College, Gulfport, Mississippi. Eighteen girls are enrolled in the ground course, and half a dozen are learning to fly. Two already hold pilots' licenses.

The main purpose of the ground course is to equip young women to relieve young men for combat duty in the possible event of a war for defense. Several secretarial students are in training for positions as aviation secretaries.

President Cox, an aviator with something over 700 solo hours to his credit, teaches the course himself. He believes the fundamentals of aviation are worthy of a place in the curriculum of a college for women along with history and mathematics.

President Cox is chairman of the aviation committee of the Gulfport Chamber of Commerce, and is director of the non-college phase of Civilian Pilot Training. He has for some time had the distinction of being the only college president who owned and flew his own plane. He has been flying for more than seven years.

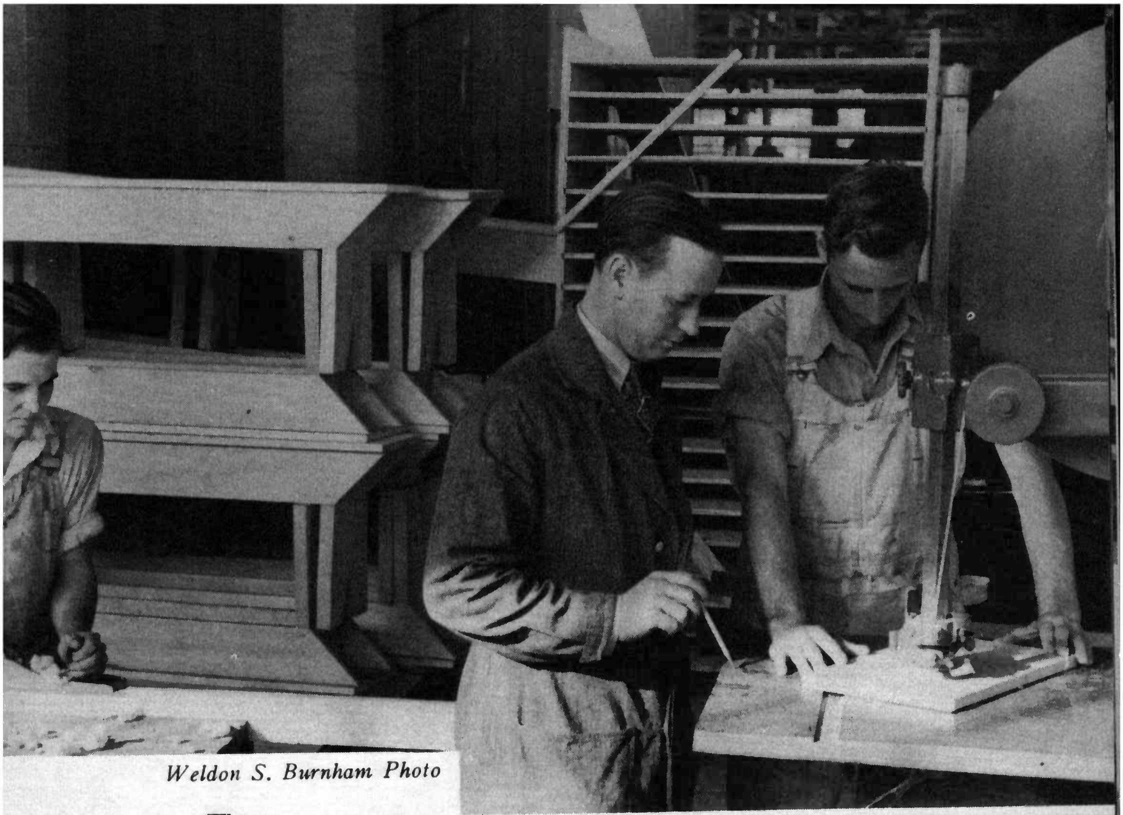


Aviation. CAA pilot (above) takes controls at Scranton-Keystone, Pennsylvania.

Photo. by Edward Zychal

Welding. Weber College, Utah, students (below) train for apprenticeships.

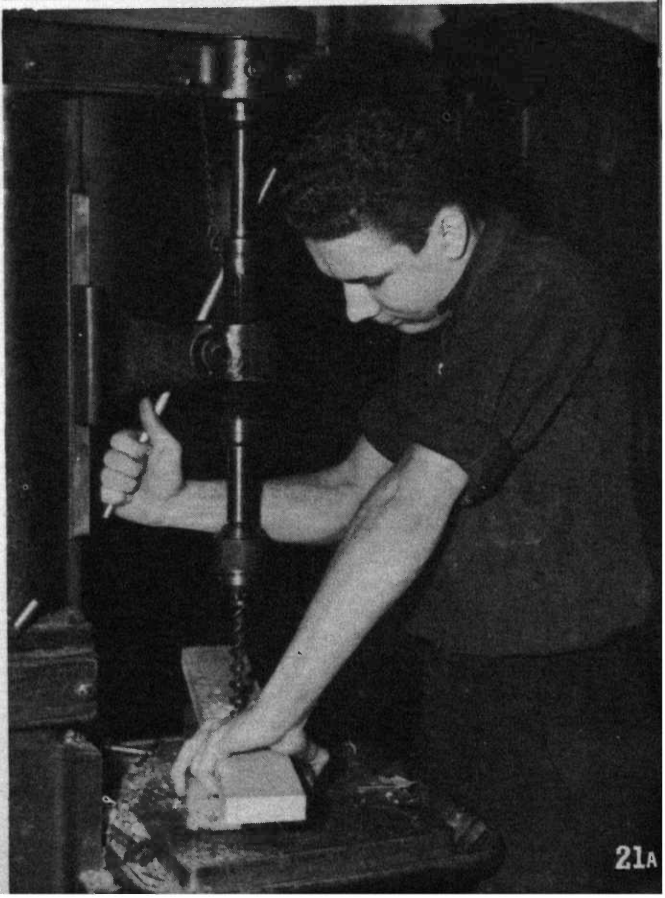
Weldon S. Burnham Photo



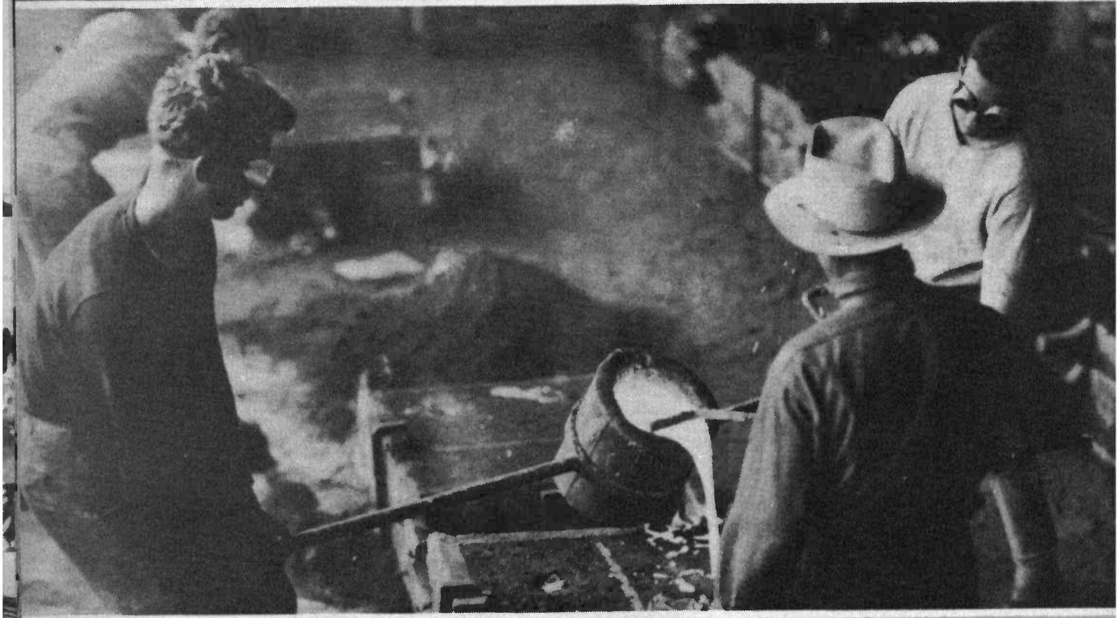
Weldon S. Burnham Photo

Carpentry. This course at Weber College, Utah (above), prepares young men to enter carpentry on an advanced apprenticeship level. Work is done in the shop and on outdoor work, including the building of a house. The course covers forms, framing, doors and sills, roof framing, timber framing, exterior finish, construction forming, interior finish, stairs, concrete work, cabinet work, mill work, building hardware, woods, tools, equipment, power and hand tools.

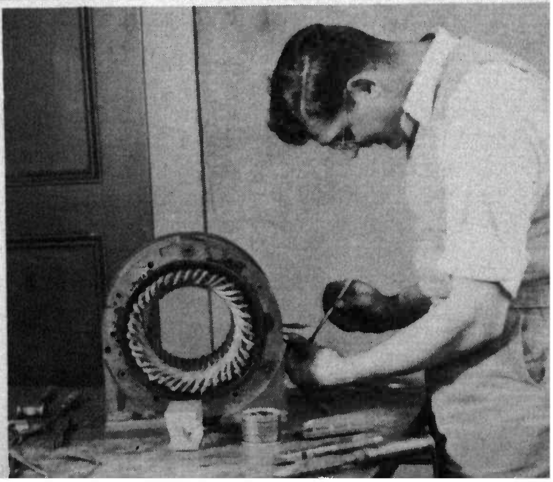
Plant Engineering. At the right is a sophomore of Hillyer Junior College, Connecticut, who has been assigned for two years to a Hartford manufacturing company on a cooperative project. For the first year he worked on repair and maintenance work, then was promoted to the operation of automatic machines. He has had opportunity to learn much about general factory maintenance, operation and machinery, and dealing with people.

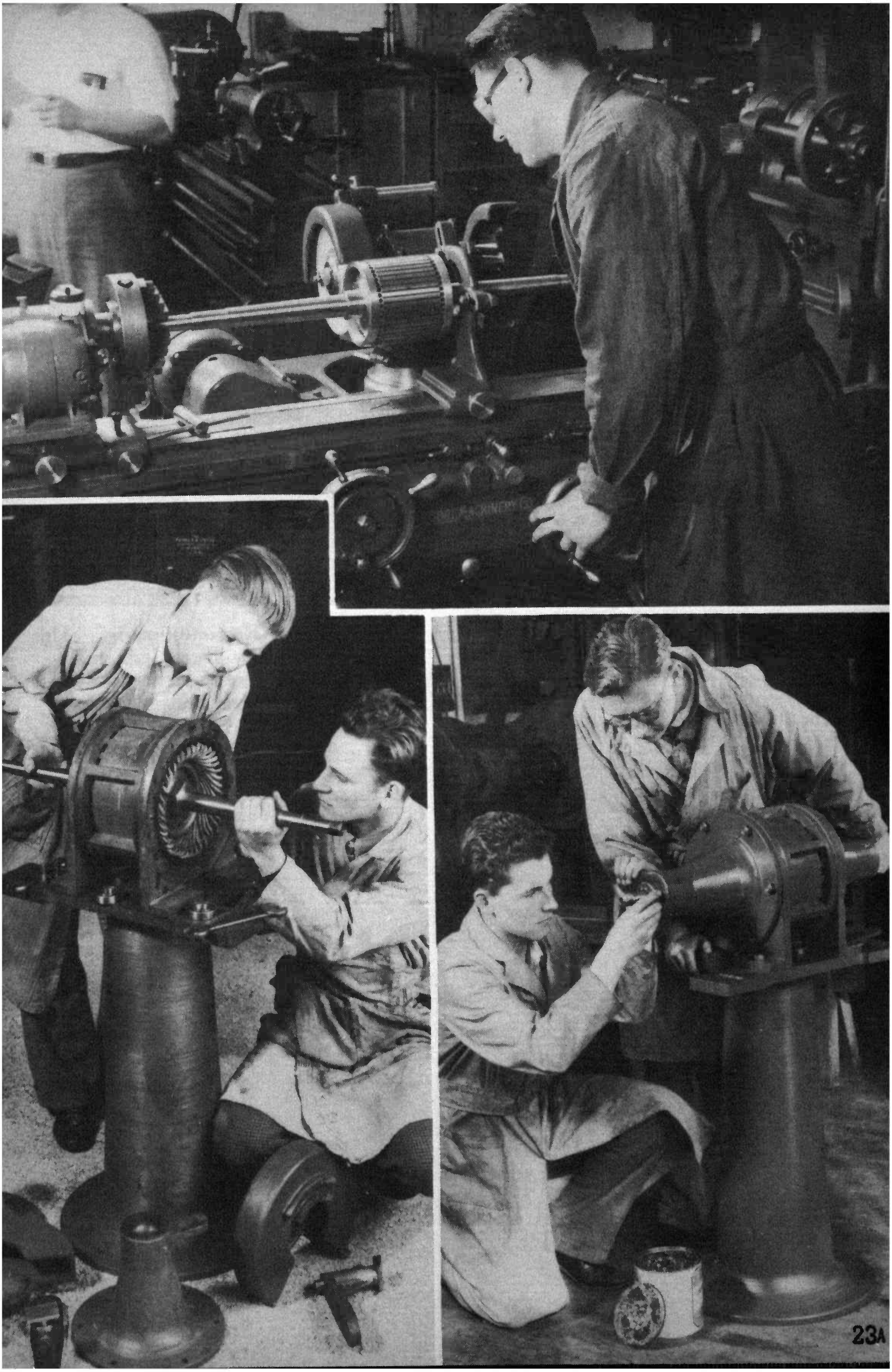


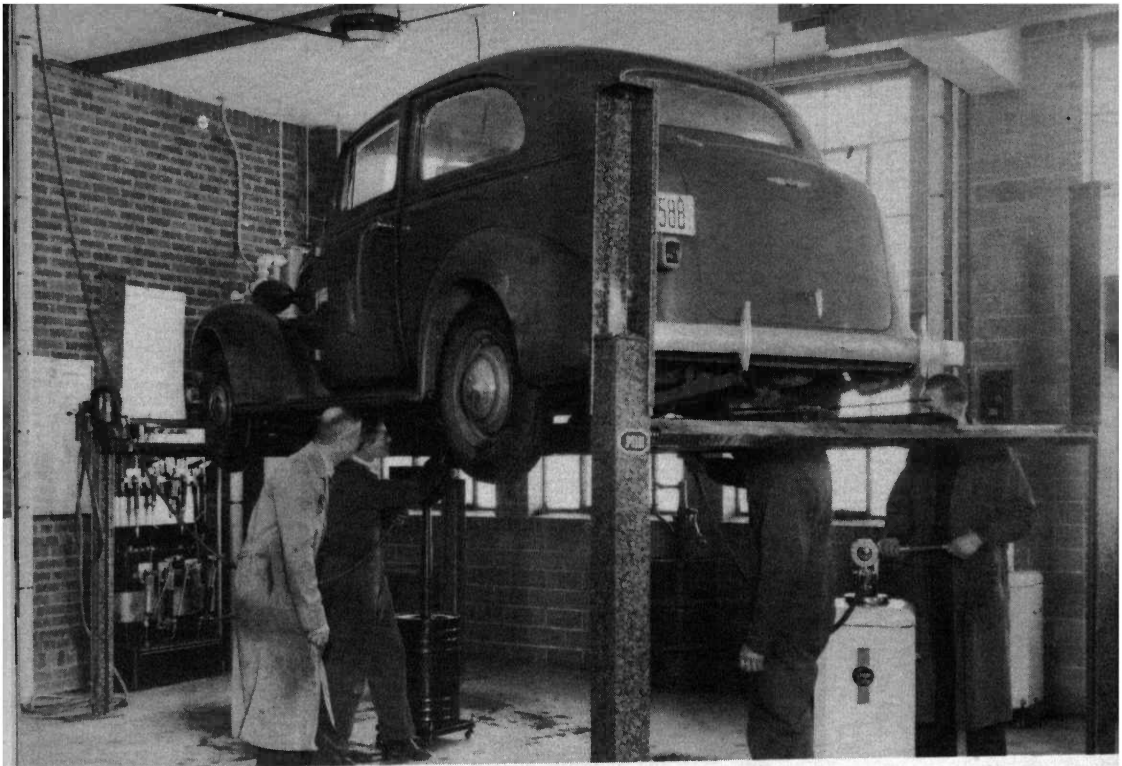
Metzger-Farmington Photo



Applied Engineering. Students at Cogswell Polytechnic College, San Francisco, in six stages of building a grinder: (1) complete the pattern for end brackets; (2) pour castings; (3) wind polyphase motor; (4) grind outer circumference of rotor; (5) assemble the motor; (6) pack the ball bearings subsequent to setting the bearing brackets. Students have built three of these grinders for their own use.





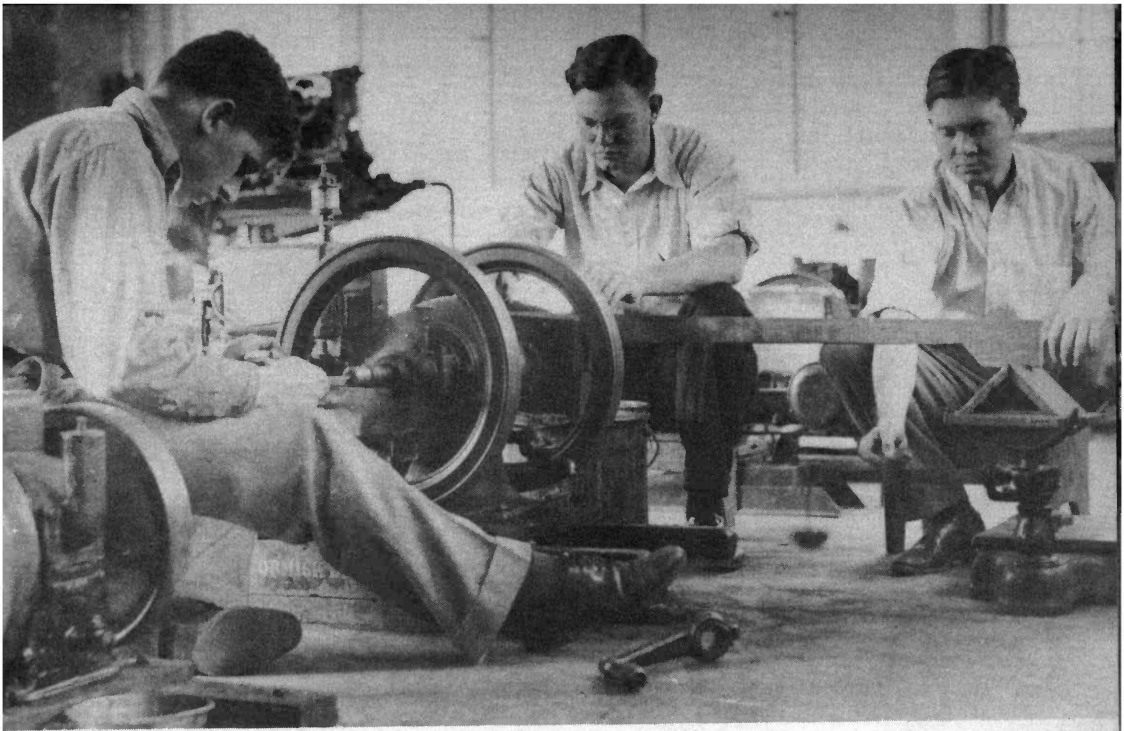


Automobile Lubrication. Two weeks of specialized instruction in this field are part of the two-year automobile trade course at North Dakota State School of Science.

Johnson Studio

Auto Body Re-conditioning. This course at Weber College, Utah, qualifies students as first class apprentices. It covers all phases of metal finishing and metal preparation, including paint work.

Weldon S. Burnham Photo



Agricultural Engineering. Students at the University of Tennessee Junior College (above) are doing an experiment to determine brake horse power for various settings of the exhaust valve, timing of the spark, and settings of the governor. Left to right they (1) check the speed, (2) adjust the brake, (3) check the weight on the lever arm.

Below, students at John Tarleton Agricultural College, Texas, are in the popular farm shop, where they repair harness, sharpen tools, learn concrete work, painting, plumbing, forging, etc.

Baxley's Studio

Oil Technology. Students of Bakersfield Junior College, California, study the drilling fluid as it comes from a 9000-foot-deep Standard Oil well in the Greeley field. The instructor explains how important the quality of the drilling fluid is in deep well drilling in California and what chemical and physical research has been necessary to develop efficient muds without making them too costly.

Below, a petroleum engineer and chemist of the Standard Oil Company of California explains calcium carbonate tests made on boiler water at a boiler plant in the Greeley field. All of the oil companies have cooperated fully to make the oil technology course at Bakersfield a success.

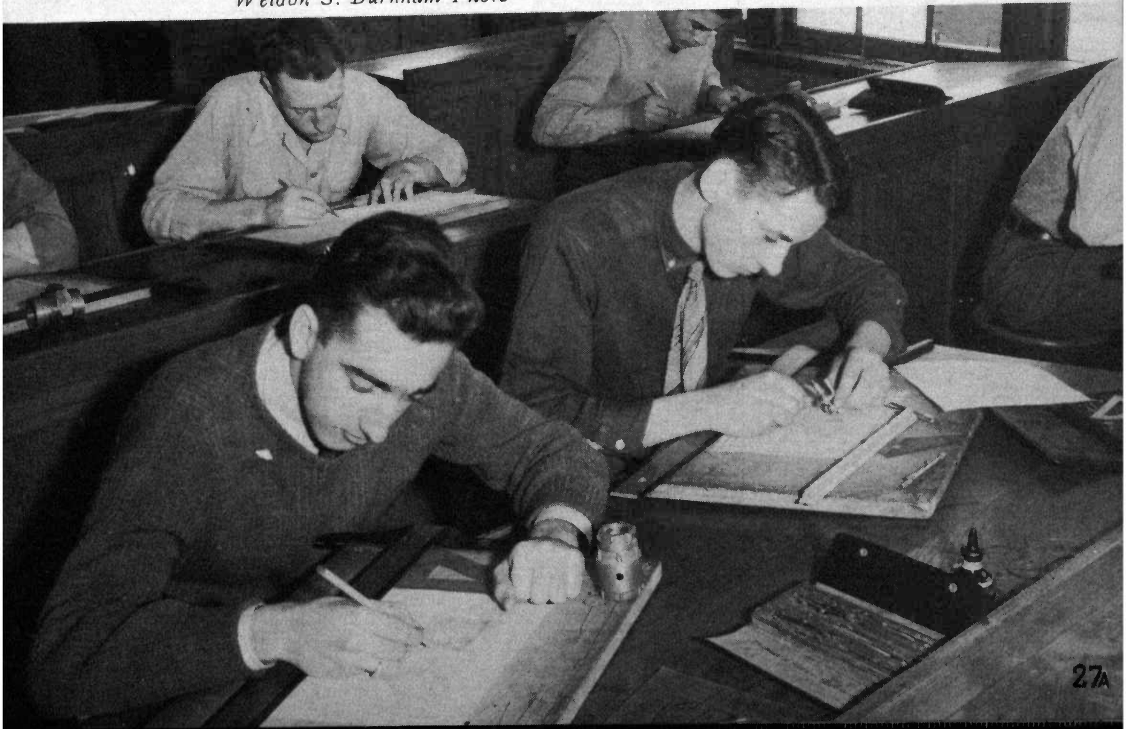
These students are sophomores. In their first year they completed basic courses in technical mathematics, chemistry, geology, surveying, and mineralogy. They also study American social problems and western culture. Sophomores in oil technology meet 15 hours a week on laboratory projects and five hours a week on related class projects.

Photos by Paul Collins

Ordnance. Repair of a 75 mm. gun is the problem of students at Weber College, Utah, above. This course was designed to aid the government in the defense program and conforms to authentic ordnance practice.

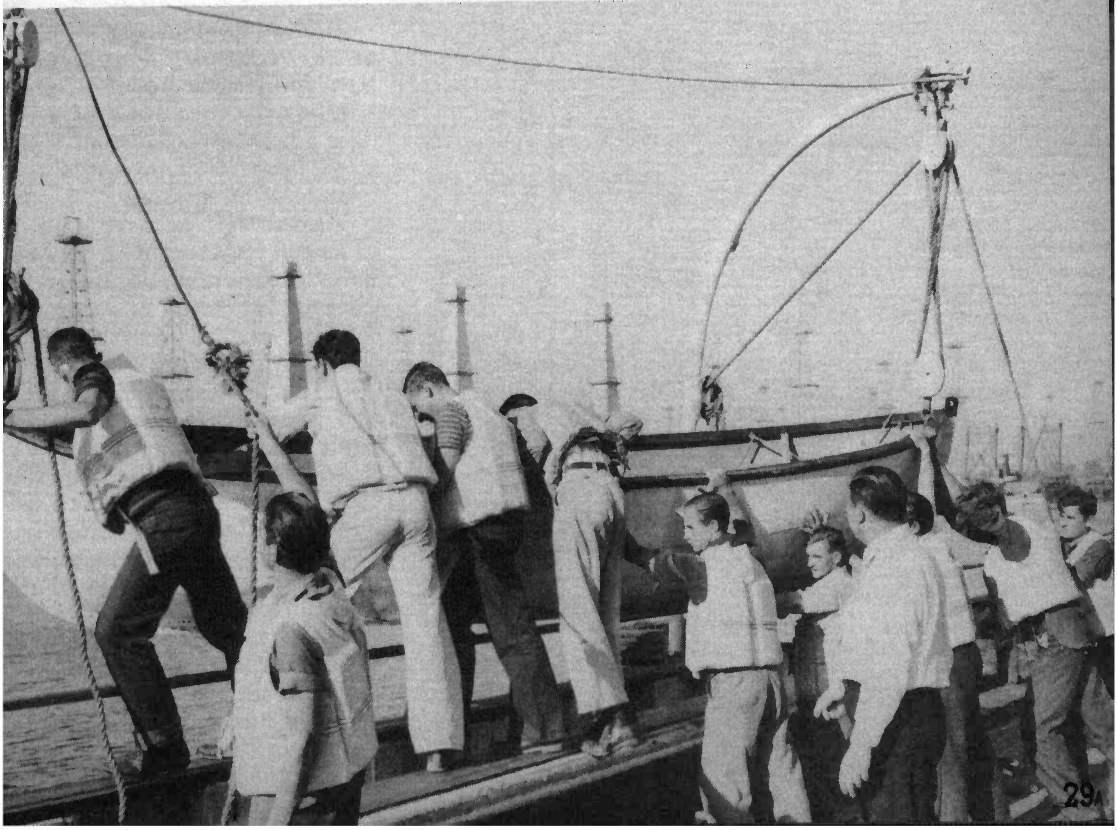
Weldon S. Burnham Photo

Advanced Drawing. Engineering students at Wright Junior College, Chicago, make freehand sketches on cross section paper from measured models. This is part of the curriculum in general engineering.

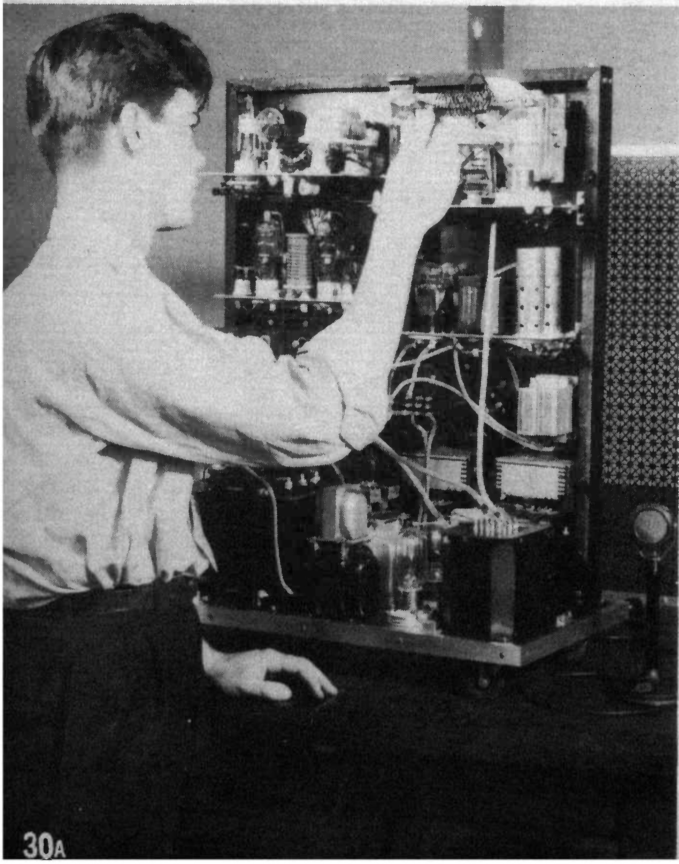


Navigation. Maritime students of Long Beach Junior College, California, prepare to paint their school ship, the Martha Buehner—two coats from the top of the masts to the water line. Seagoing routine aboard ship enables students to qualify for seamen's papers. The college helps them find berths.

Navigation. Armed with chipping hammer, bucket, and brush, Long Beach students go over the side in boatswains' chairs to tidy up. "Man the boats," is the order to students below as they launch a lifeboat.

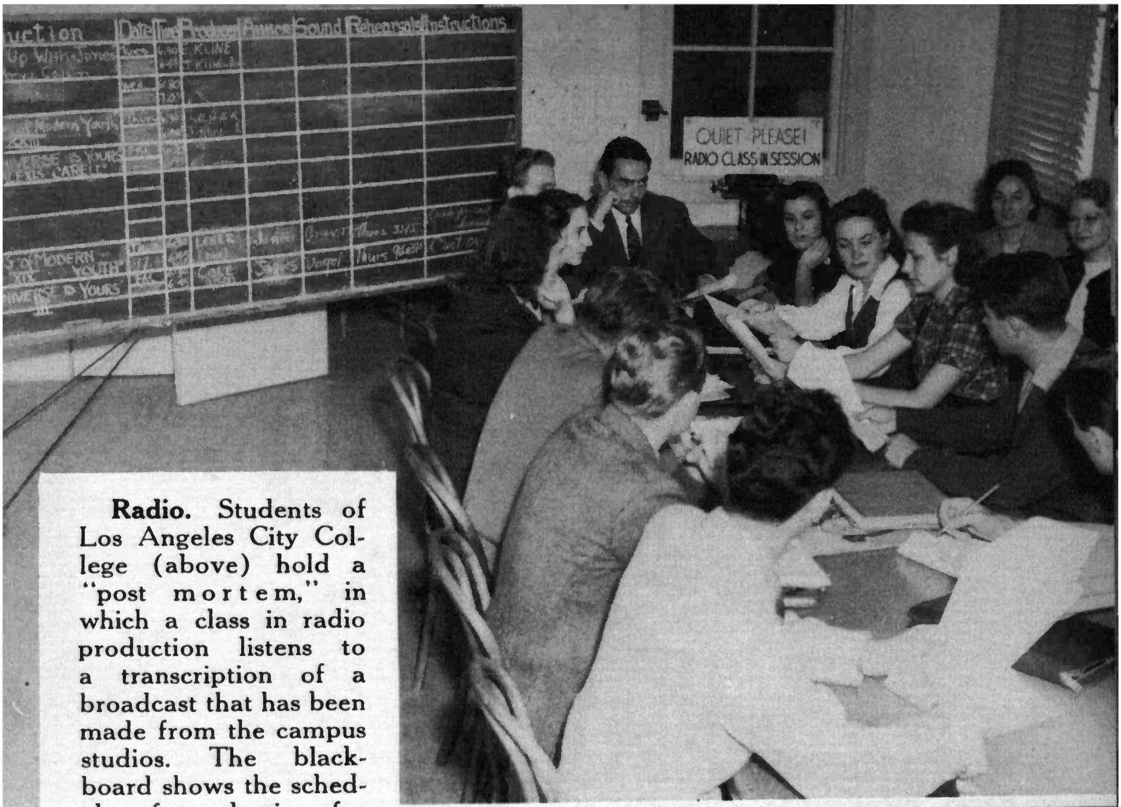


Gabriel Moulin Phot



Radio Engineering. Seated at the controls, a student at San Francisco Junior College handles the broadcast of a student play (above). San Francisco Junior College has its own broadcasting studios.

At the left is a student of Cogswell Polytechnical College, San Francisco, neutralizing the final amplification of a portable transmitter. This transmitter is now operating as station W6HJN. Design, installation, and maintenance of electrical equipment supplement the electrical courses studied in the class rooms. Practical knowledge of principles is added to mastery of tools and processes. Emphasis centers on local applications that may follow as a result of the student's training. While he is mastering subject material, an attempt is made to acquaint him with working conditions in the associated industries.


uction Date Time Producer Announce Sound Rehearsals Instructions
KLINE
QUIET PLEASE!
RADIO CLASS IN SESSION

Radio. Students of Los Angeles City College (above) hold a "post mortem," in which a class in radio production listens to a transcription of a broadcast that has been made from the campus studios. The blackboard shows the schedule of production for other broadcasts.

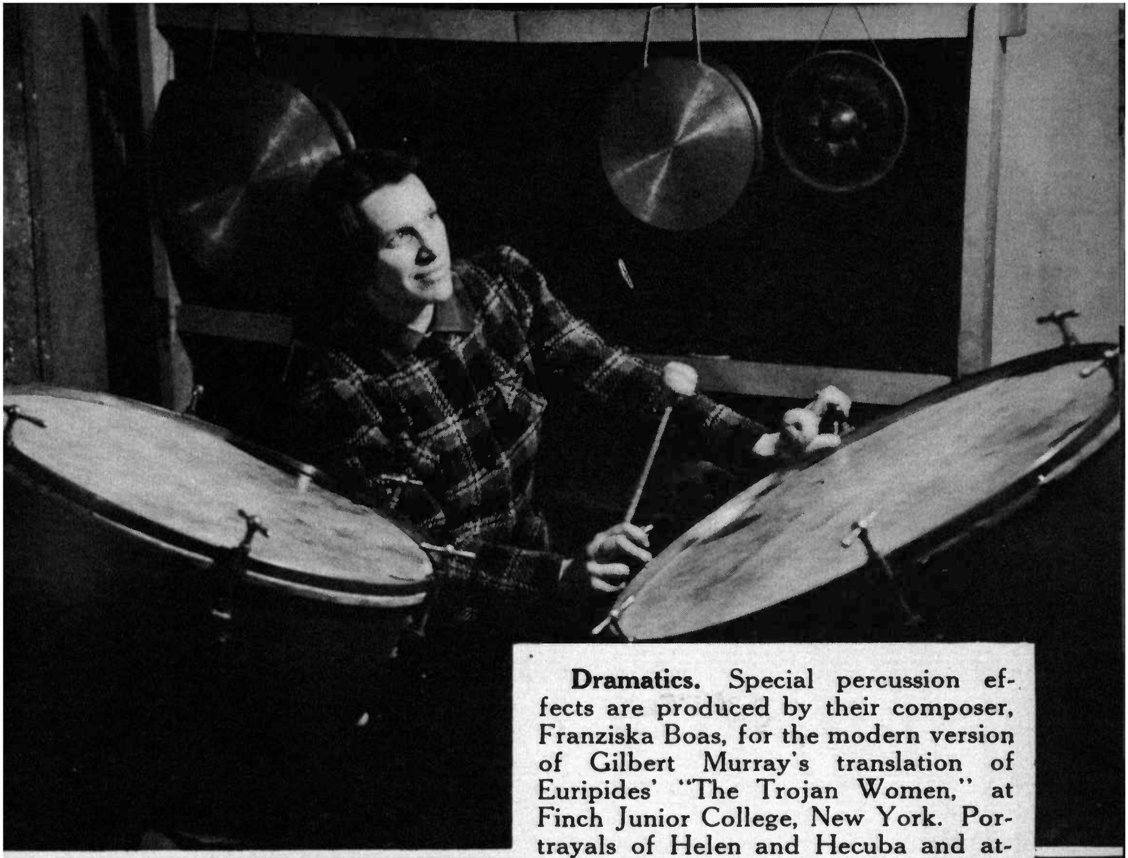
The two Los Angeles students below are rehearsing a sound effect in LACC radio studios.

Photos by Pierce Grant

Radio Broadcasting. Students of Los Angeles City College (above) broadcast a play. Below, a broadcast from Ward-Belmont School, Tenn.

Photo by Pierce Grant

Photo by Ed Clark



Dramatics. Special percussion effects are produced by their composer, Franziska Boas, for the modern version of Gilbert Murray's translation of Euripides' "The Trojan Women," at Finch Junior College, New York. Portrayals of Helen and Hecuba and attendants in this same performance of the theater arts workshop at Finch Junior College are shown below.

Photos by Robert Clary

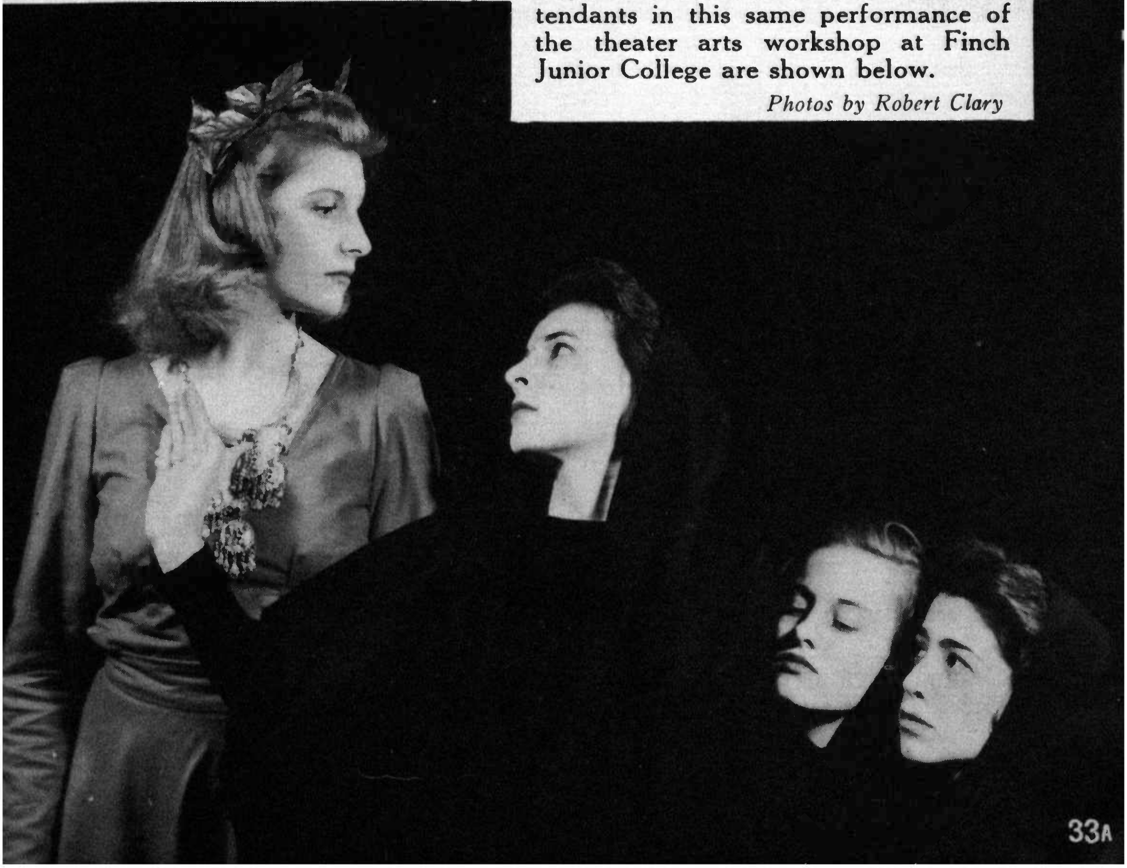


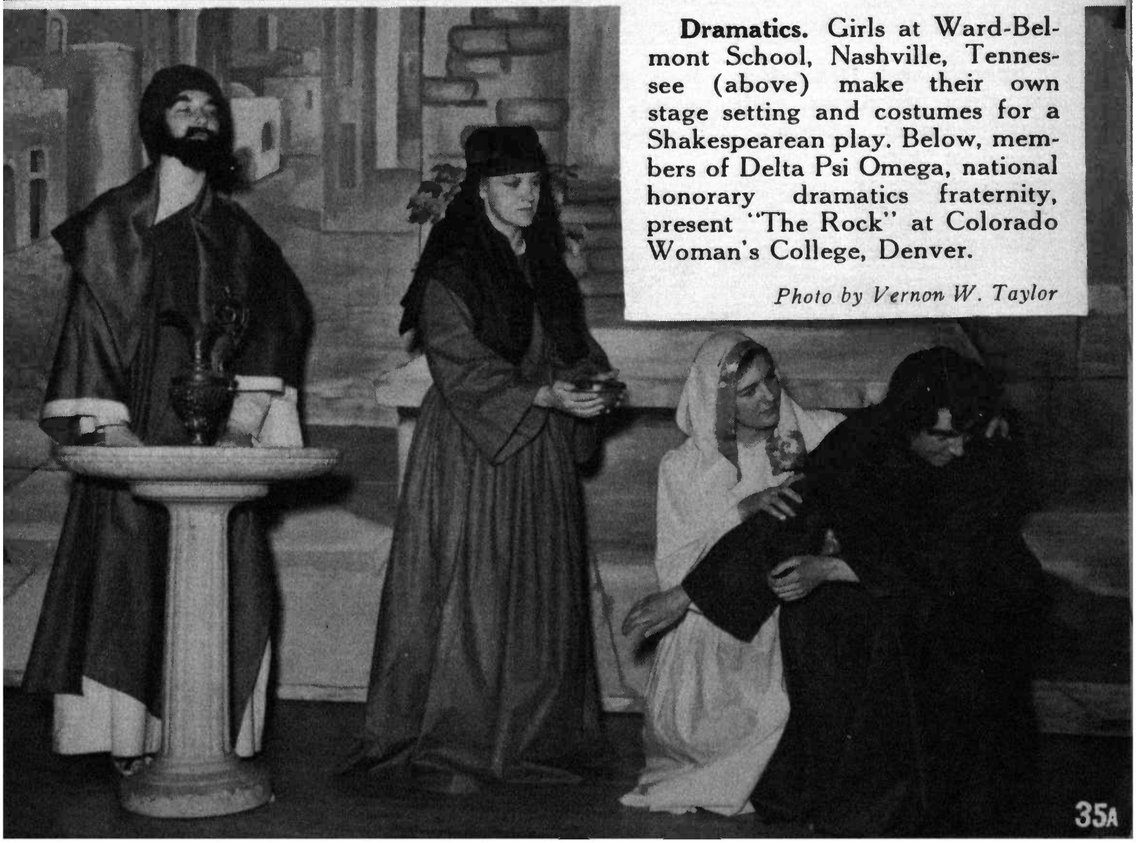
Photo by William M. Rittase

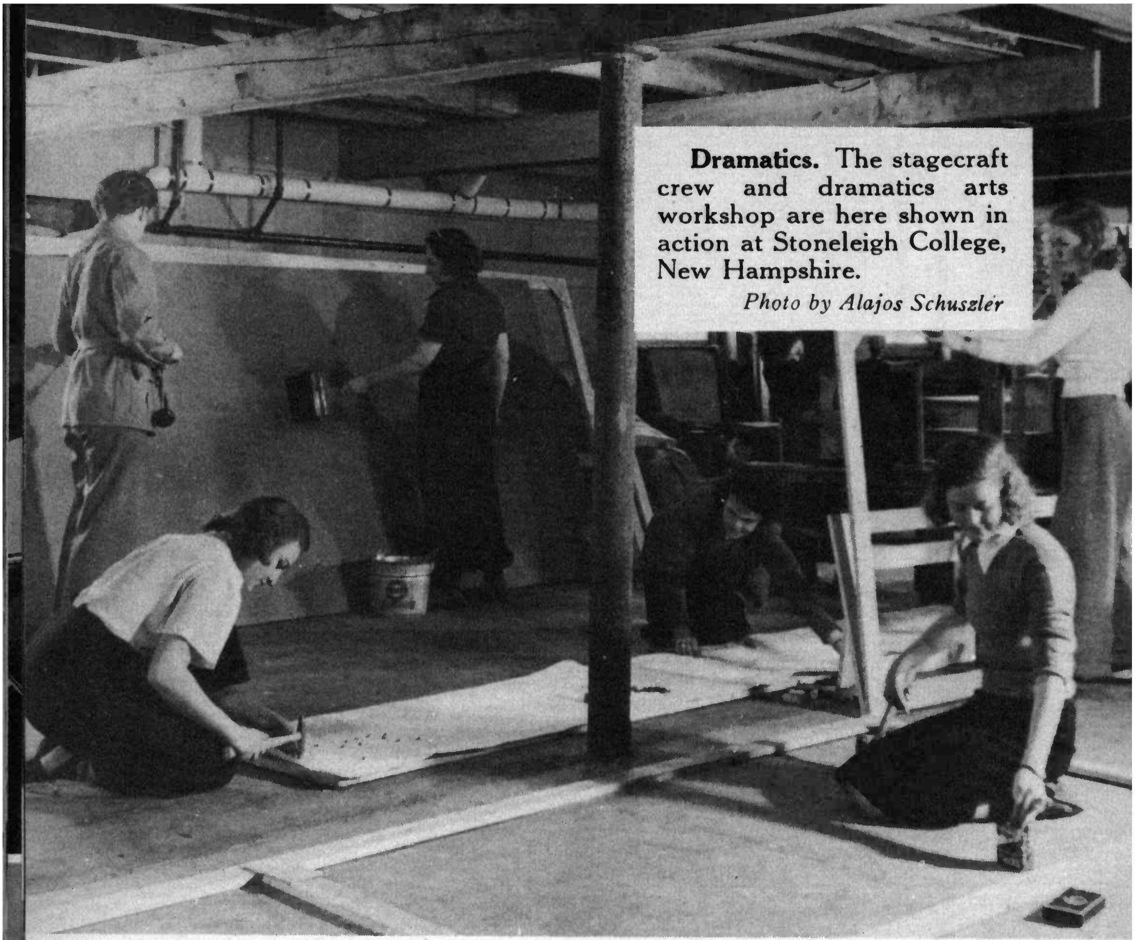
Dramatics. Four girls of the Garland School, Boston, dramatize, by the manipulation of marionettes, the story of Goldilocks and the Three Bears. The making of the marionettes shares with stage productions at Garland.

John E. Hood Photo

Dramatics. Girls at Ward-Belmont School, Nashville, Tennessee (above) make their own stage setting and costumes for a Shakespearean play. Below, members of Delta Psi Omega, national honorary dramatics fraternity, present "The Rock" at Colorado Woman's College, Denver.

Photo by Vernon W. Taylor



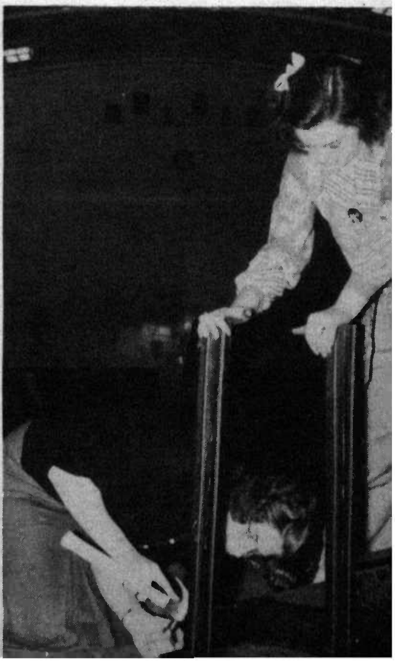


Dramatics. The stagecraft crew and dramatics arts workshop are here shown in action at Stoneleigh College, New Hampshire.

Photo by Alajos Schuszler

Speech and Dramatics. Two girls and their instructor (left below) at Ward-Belmont School, Tennessee, make speech records. At right, two members of a stage crew at Lasell Junior College, Massachusetts.

Commercial Photo



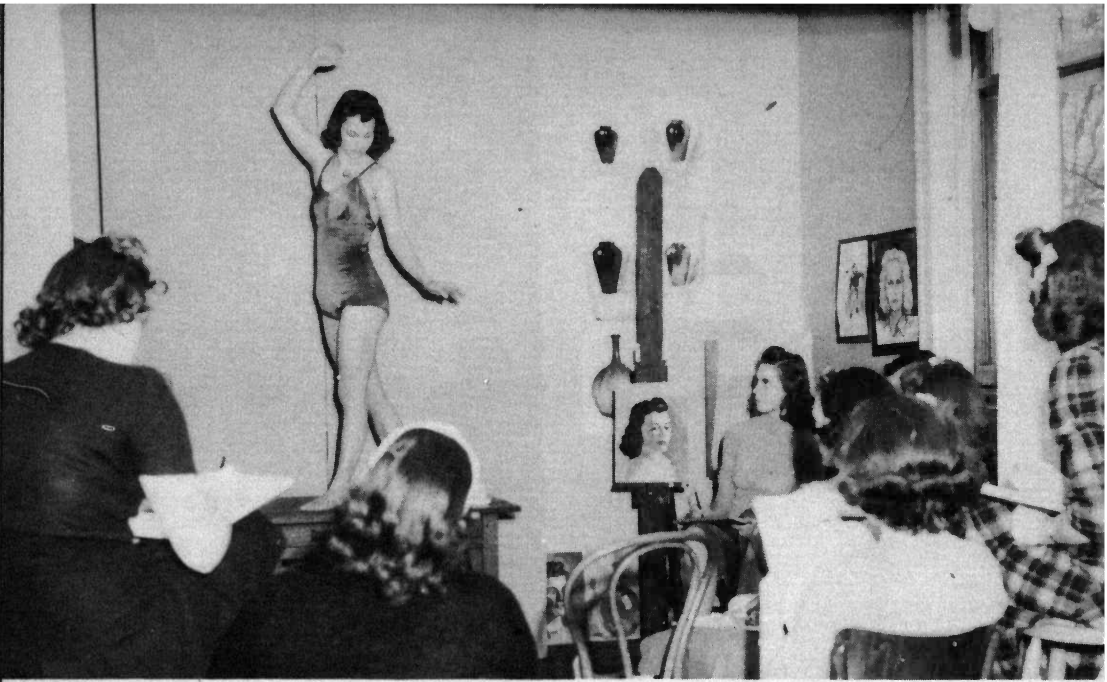
Music. The **a cappella** choir is at Los Angeles City College. The harpist is at Finch Junior College, New York. If the student enters college with sufficient training, a variety of opportunities may open after graduation.

Music. A piano student at Averett College, Virginia. In the fine arts, courses are offered in art, piano, organ, violin, voice, speech, and dramatic art.

Music. Members of the college chapel choir of William Woods College, Fulton, Missouri (above), listen to a recording of a broadcast which they gave over station KSD in St. Louis. With them is their instructor in music theory, who points out the strong and weak points of their broadcast. This is one of the methods of teaching customarily used at William Woods. The college chapel choir is composed of twelve selected seniors who specialize in sacred and classical music.

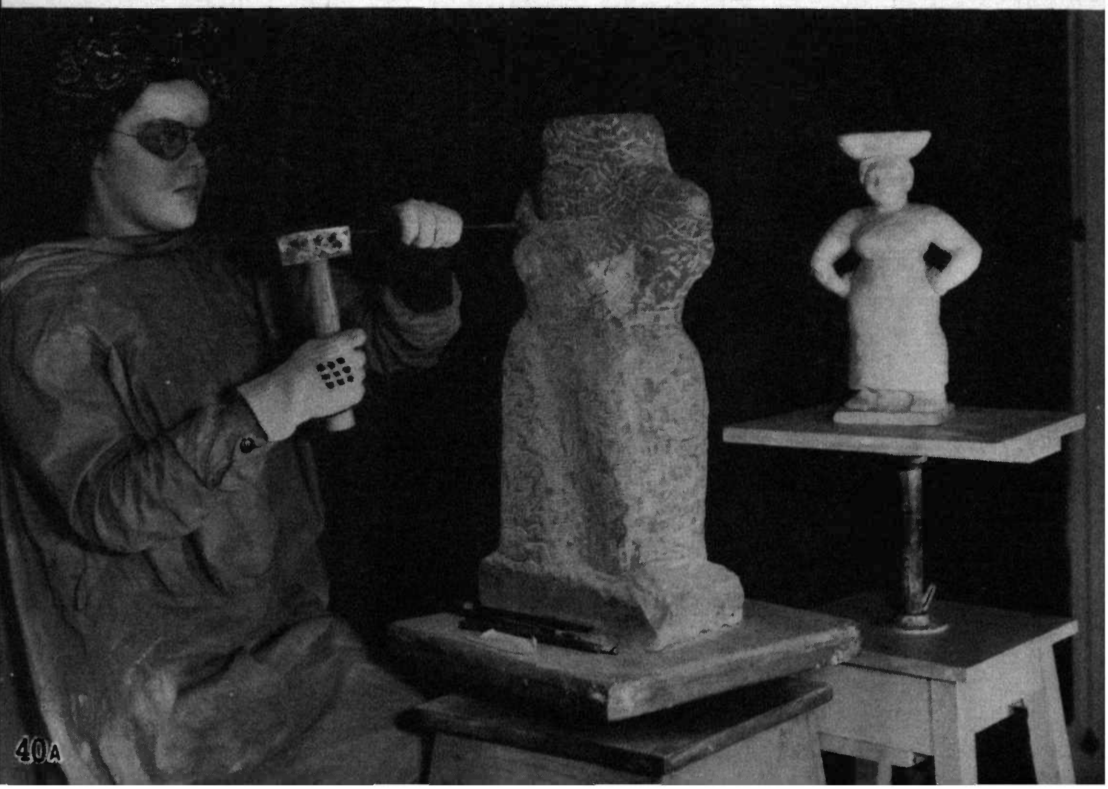
Below, a trio from Centenary Junior College, Hackettstown, New Jersey, broadcasts over station WEST.

Terminal courses in music are reported by 145 junior colleges.



Art. Students at Centenary Junior College, New Jersey (above) sketch as a fellow student poses.

Below, a student of sculpture at Finch Junior College, New York, carves direct in stone. Her model is a plaster cast which she herself has executed. The design was first made in clay. A plaster mold was made around the clay. The clay was removed and plaster was poured into the mold. The mold was chipped off, leaving the plaster model. The model is now used as a guide for the stone carving.

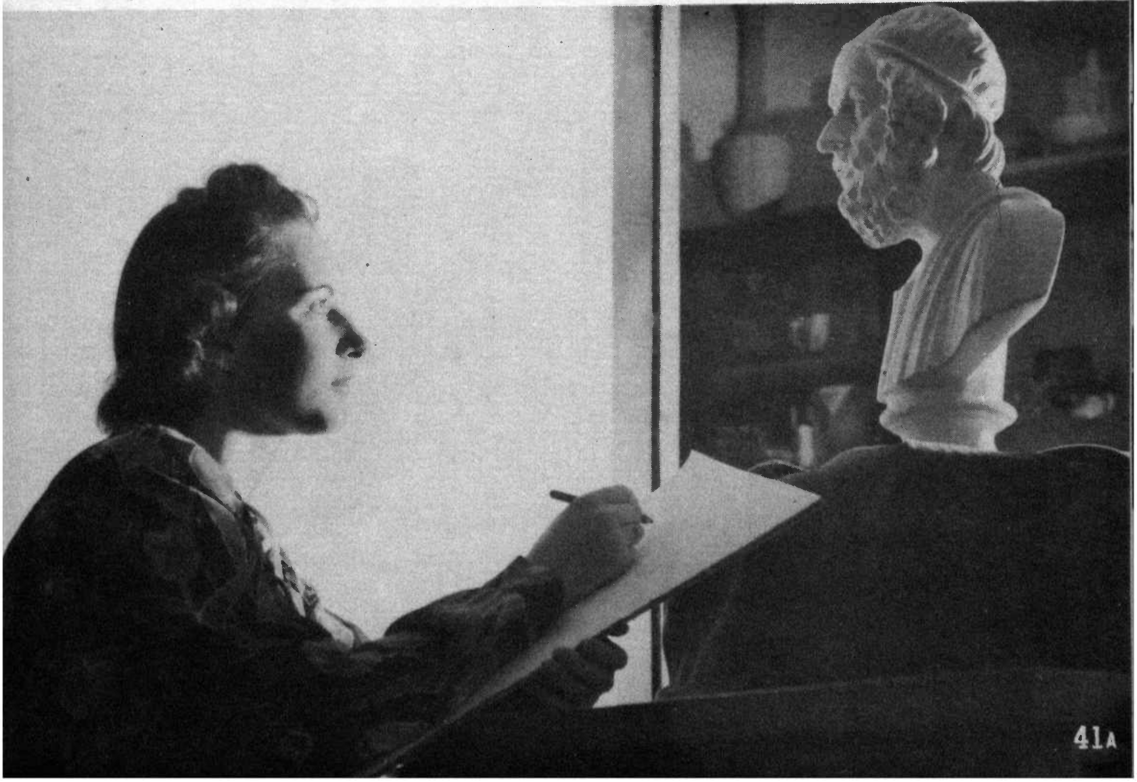


Art. Beauties of the New Hampshire woods are caught by a sketch class (above) from Stoneleigh College. The art course may serve as a basis for entrance into the field of commercial art or as a means for obtaining a more comprehensive knowledge of the fine arts. Each student has a "winter project," which may consist of work in the art department of an advertising firm, or of theater display, museum work, or related activity.

Photo by Barbara Goodspeed

Below, a student in the fine arts department of Colorado Woman's College, Denver, at work in her studio, sketches the classic bust of Homer.

Photo by Mary E. Rhoads

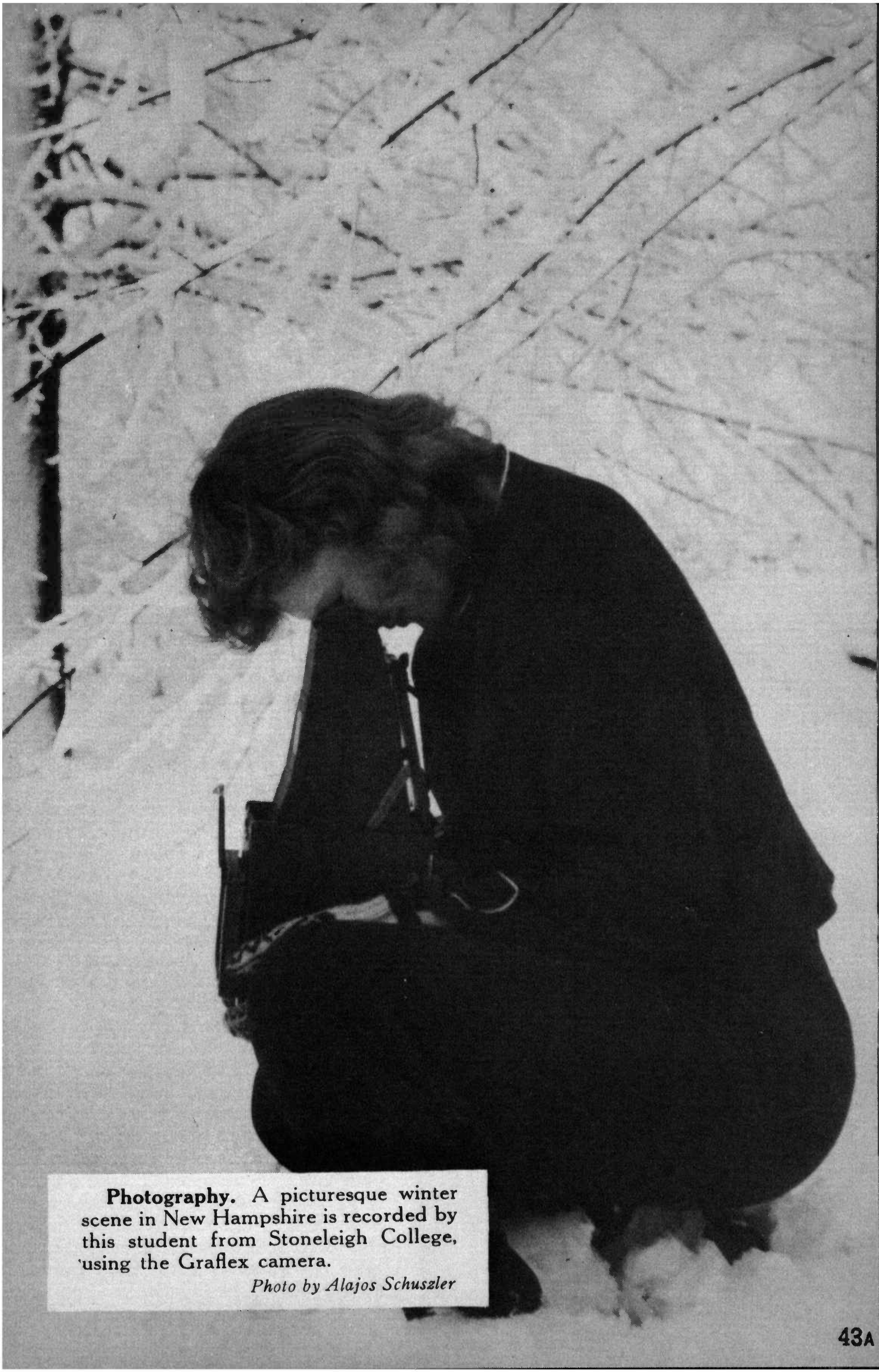


Commercial Art. Students at Weber College, Utah (above) are trained in all modern media in illustrating and advertising.

Photo by
Weldon S. Burnham

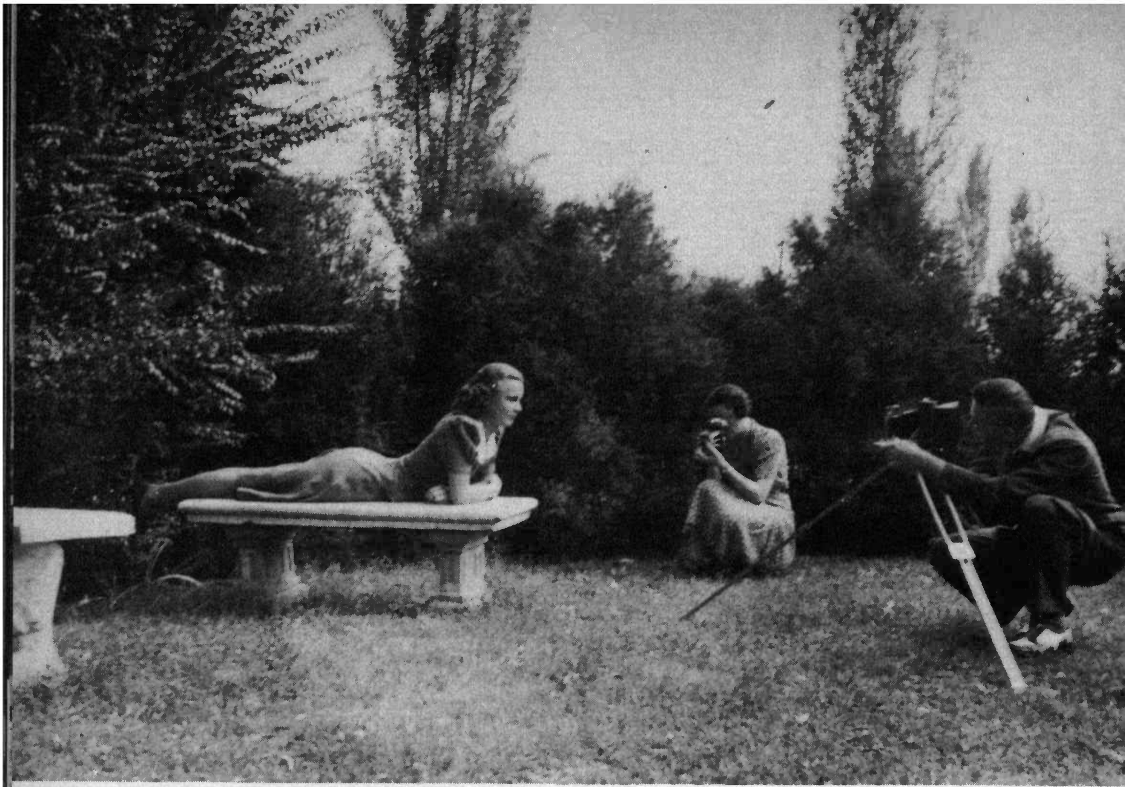
Photography. Use of the retouching board for perfection of negatives is learned at Stoneleigh College, New Hampshire (below).

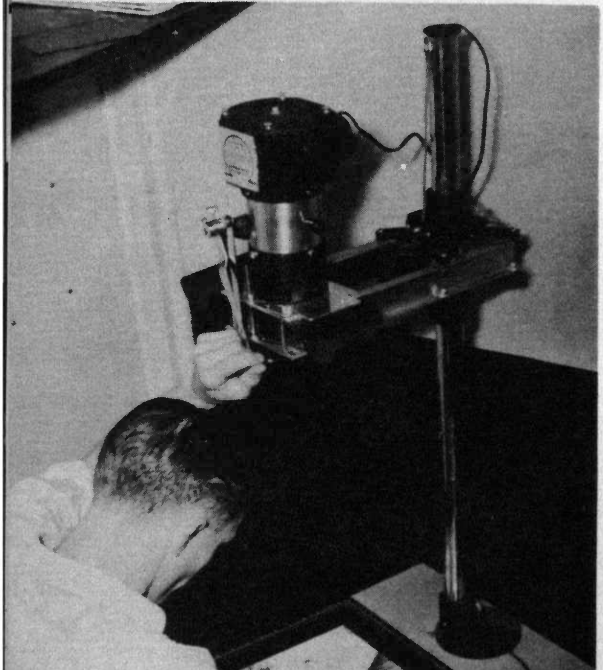
Photo by
Alajos Schuszler



Photography. A picturesque winter scene in New Hampshire is recorded by this student from Stoneleigh College, 'using the Graflex camera.

Photo by Alajos Schuszler

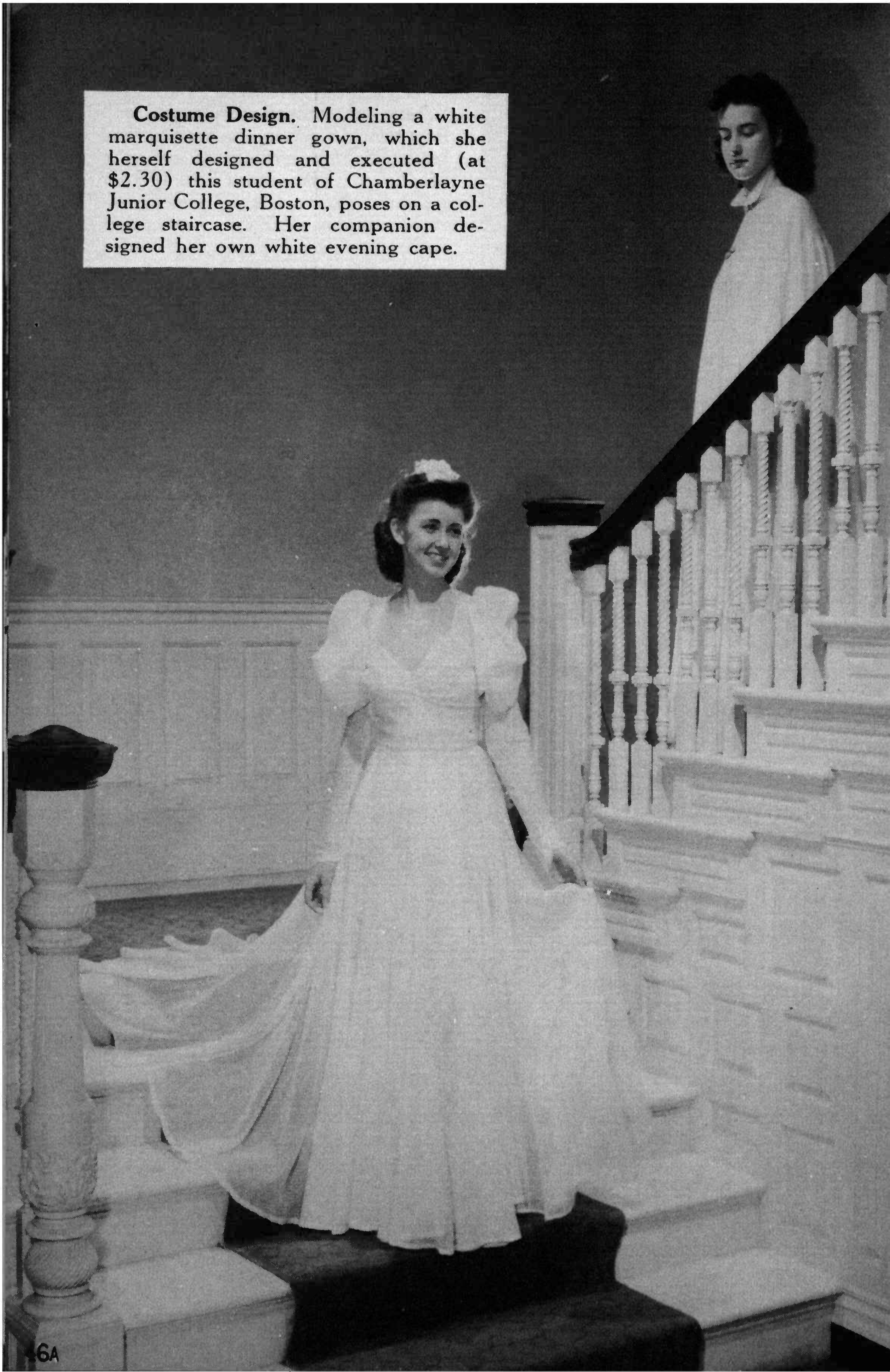




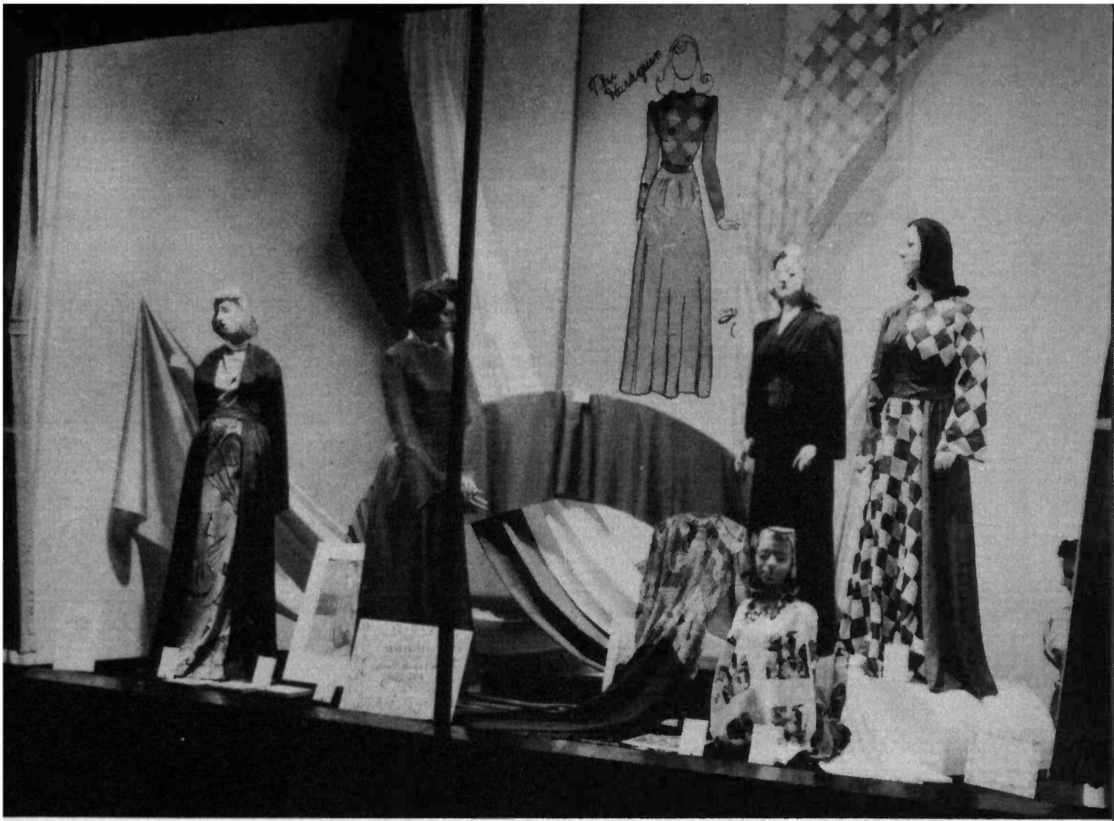
Photography. In the vivid verdure of Virginia, a Sullins College girl (above) poses for student-faculty practice and demonstration with the camera. Both the science department and the art department emphasize photography as an interesting avocation and as a remunerating vocation. In the memory book of the Sullins girl is found many a happy reminder of college days, which she or some companion has garnered by camera.

The staff photographer for the student year book of Modesto Junior College, California, is shown at the left, making an enlargement for use in the annual. Under the direction of its veteran instructor, the Modesto photography division has won national attention for some of its students. Advanced students may select one or more of the following areas of photography for special attention: motion pictures; photography in commercial art; portraiture; visual aids for instruction; landscape photography; newspaper photography; commercial photography; color pictures; nature photography; photo-micrography; infra-red photography; copying processes.

Interior Decoration. Drapes for a Boston window are arranged at Garland School by girls from Iowa and Michigan. They learn how to treat walls and floors, select draperies and rugs, arrange furniture, select accessories. *Photo by William M. Rittase*



Costume Design. Modeling a white marquisette dinner gown, which she herself designed and executed (at $2.30) this student of Chamberlayne Junior College, Boston, poses on a college staircase. Her companion designed her own white evening cape.



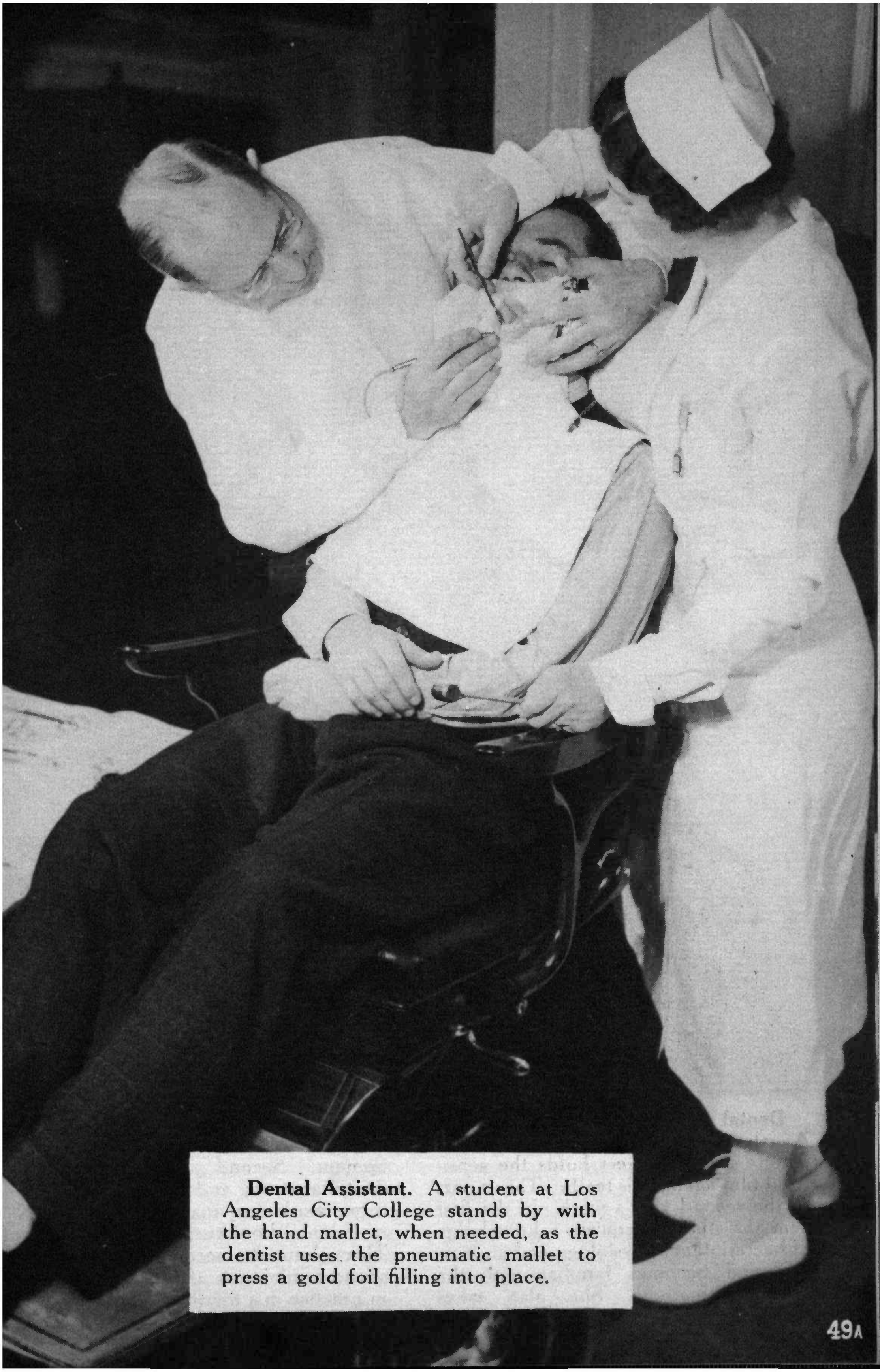
Costume Design. Displayed in a window of a leading Boston department store (above) are original Picasso designs executed by students of Lasell Junior College. Each manequin is a replica of the student designer, not only in size but even in face and complexion.

Students at Weber College, Utah (below), prepare designs for street costumes, working on miniature models.

Weldon S. Burnham Photo

Costume Design. A student at Garland School, Boston, looks up from her design of a costume in the Scottish mode, to see what her companion has done in the way of a nifty light wrap. Plates showing the influence of history on costume design fill the wall with idea material. Gowns are designed and executed with emphasis on the problems of the individual student.

Photo by William M. Rittase

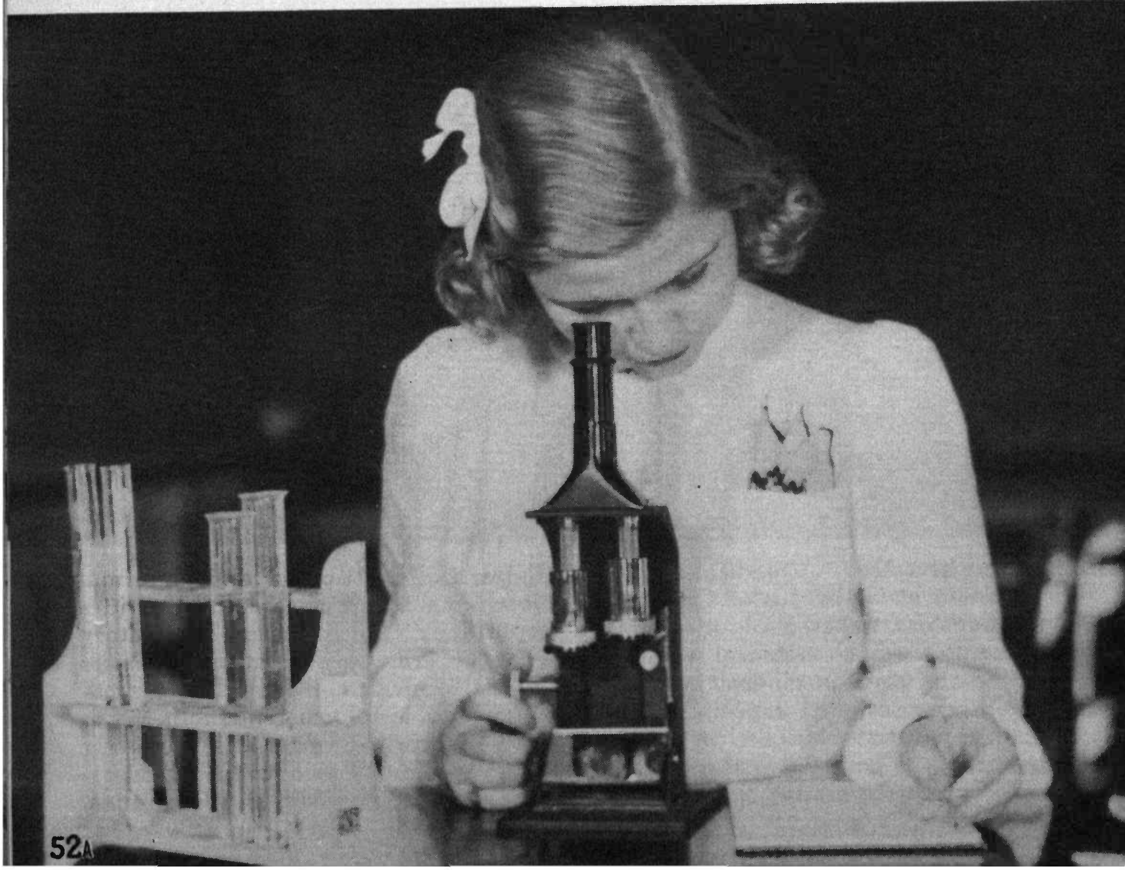


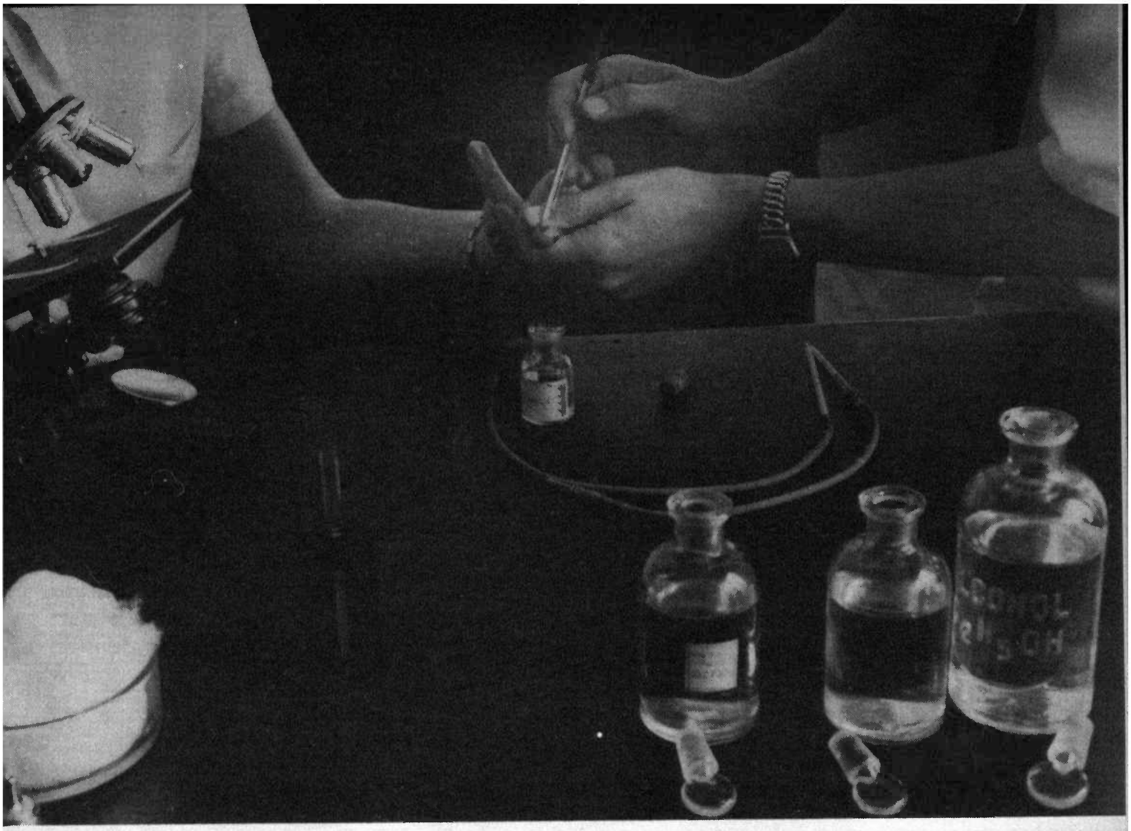
Dental Assistant. A student at Los Angeles City College stands by with the hand mallet, when needed, as the dentist uses the pneumatic mallet to press a gold foil filling into place.

Dental Assistant. A student at Los Angeles City College takes an X-ray picture as the subject holds the sensitized film against his teeth. This is part of the second year's work. In the first year the student acquires a knowledge of bacteriology, physiology and chemistry, and becomes familiar with the scientific method. She also takes courses in shorthand, typing, nursing and first aid, and in personality development. Second year work includes dental anatomy and pathology, laboratory work for dentists, dental X-ray, dental bookkeeping, and dietetics. Throughout the second year she must spend a minimum of five hours a week in practice in a dentist's office.

Medical Secretary. A medical secretarial student at Colby Junior College, New Hampshire, takes a blood count on a classmate. Such technical work is studied in the class in clinical laboratory methods, designed especially for medical secretarial students in their third year. The course is a three-year course. Clinical laboratory practice includes study of normal and abnormal blood counts and smears and provides opportunity for practical laboratory work in urinalysis, basal metabolism tests, electrocardiography, X-ray technique, and histological methods. Endeavor is made during the last semester to have students gain practical experience in doctors' offices and hospitals.

Medical Secretary. A student at Colby Junior College charges a blood cell counting chamber (above), and another reads the colorimeter (below).





Nursing. The taking of a sample for blood typing is shown above, as demonstrated by students at Glendale Junior College, California. It is part of the work in bacteriology for nurses, in which laboratory work includes routine techniques, identification, growth characteristics, and microscopic study of important type organisms and pathogens.

Medical Technicians. Students at Larson Junior College, Connecticut, in their laboratory in clinical science (below), gain knowledge to help the medical secretary understand her work, or to be of aid to workers in social service. They become acquainted with medical terminology, diagnosis, laboratory facilities, and aspects of physiology and other sciences.

Laboratory Technicians. The students so busily engaged above are the members of the laboratory technician's group in the chemistry laboratory at Mount Aloysius Junior College, Cresson, Pennsylvania. The training of laboratory technicians is reported in at least half a dozen junior colleges.

Home Economics: Foods. Weighing each chop and salad ingredient, these students of Finch Junior College, New York (below), make a scientific record of their food preparation. This is part of their practice cottage assignment in home economics. They must know both costs and nutrition values.

Photo by Kenneth Heilbron

Home Economics: Foods. Women in the cookery class at Bethune-Cookman College, Florida (above), are trained to select, prepare, and serve food in large and small quantities. So, also, are they trained at Colorado Woman's College, Denver, one of whose students (below) is shown demonstrating the results of large quantity baking of fancy pastry. The study of foods has the objective of helping to prepare for home management, through acquainting the student with problems of family nutrition as related to budget limitations. It may also lead to employment in tea rooms, cafeterias and similar places.

Photo by Vernon W. Taylor

Home Economics: Foods. Above, a student at Scranton-Keystone Junior College, Pennsylvania, bakes a family-size cake in a home oven.

Photo by Edward Zychal

Below, a group of students at Weber College, Utah, prepare fancy pastries and other goodies in quantities that give promise of a party in the offing.

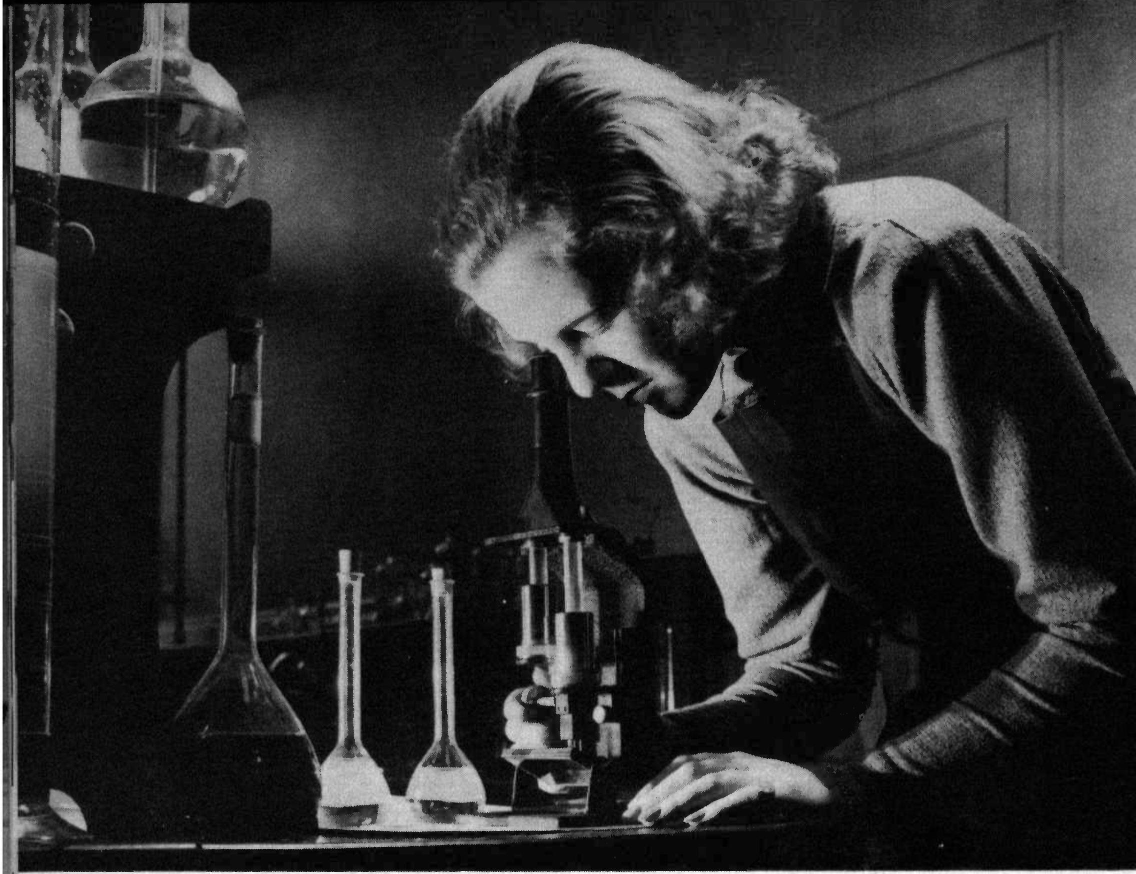
Weldon S. Burnham Photo

Weaving. Weaving is one of many projects carried on each semester by home economics students at Modesto Junior College, California.

T. Shoob Studio

House Planning. At her drawing board at Garland School, Boston, this girl from Michigan plans a home, under direction of a practicing architect.

Photo by William M. Rittase



Household Science. Through the microscope at Garland School, Boston, the girl above sees some of the bacteria that menace health.

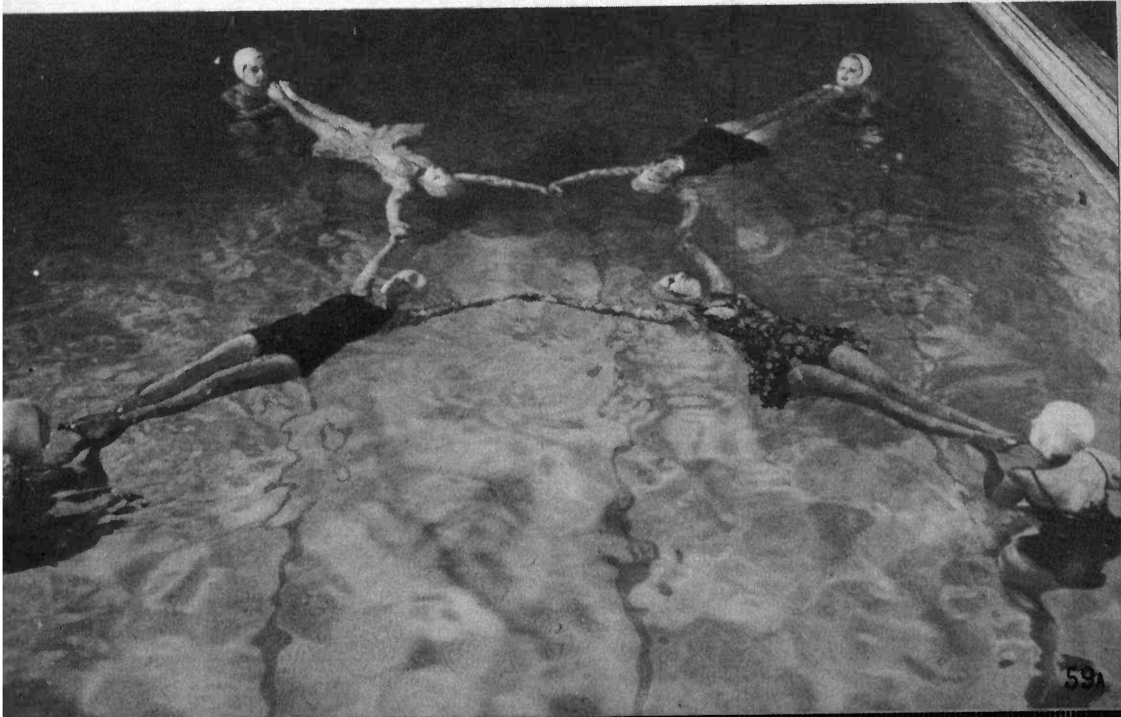
Photo by William M. Rittase

Household Arts. Students of "the American home" at Glendale Junior College, California (below) prepare for tea.

Power Machine Operation. A course to train operators for the garment making industry, is given at Weber College, Utah.

Weldon S. Burnham Photo

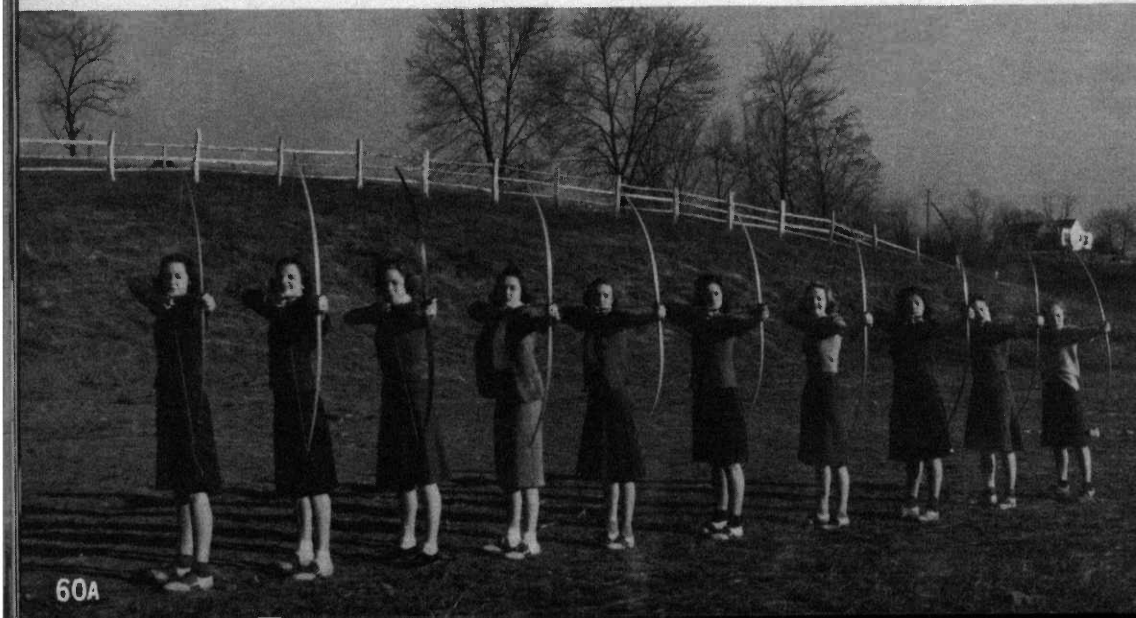
Physical Education. Water ballet is part of the physical education program at Centenary Junior College, New Jersey.



Physical Education. Sullins College, Virginia, maintains a stable of 27 gaited horses, with a beautiful stone stable. The Hoofprints Club has a membership of 175 girls, and their mounts win many prizes.

Physical Education. The ski team at Green Mountain Junior College, Vt.

The Sullins College girl goes in for archery.

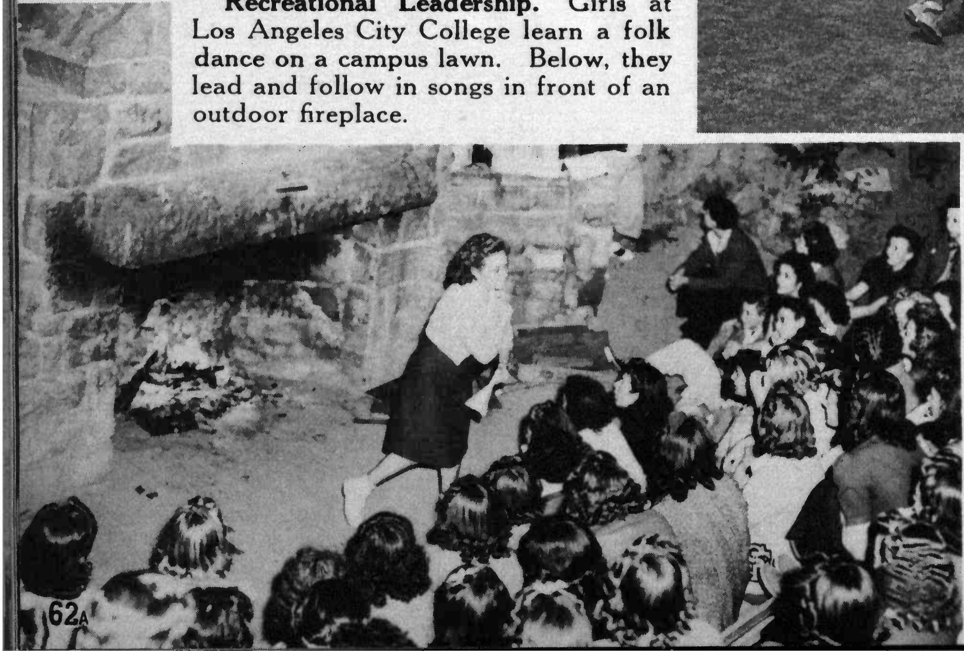


Physical Education. Not real Indians, but students at Green Mountain Junior College, Vermont, these men and maids were in the pageant which helped celebrate the close of the physical education program in the spring of 1940. At the left a Hockaday Junior College, Texas, girl practices a good kick for soccer. And the dance group below is at Chamberlayne Junior College, Boston, practicing "countercurrents."

Photo by Wm. Langley

Recreational Leadership. This situation at Los Angeles City College, above, is not serious. The girls are learning first aid, to be ready for playground accidents.

Recreational Leadership. Girls at Los Angeles City College learn a folk dance on a campus lawn. Below, they lead and follow in songs in front of an outdoor fireplace.



Recreational Leadership. "Coaching and Officiating in Team Games" is "Course P. E. 54" at Los Angeles City College. There are more things in basketball than are dreamed of in the average philosophy. And so it is with hockey, volleyball, baseball, badminton and tennis. The Los Angeles Board of Education is the largest employer of these graduates, who become directors of school playgrounds. When they work, they play.

Police Officers. They have to be quick on the trigger (turn, draw, and fire)—these students of police work at Los Angeles City College—but that's not all. Their course includes criminal and civil law, chemistry, physics, psychology, sociology, political science, English, health and first aid, police gymnastics, jiujitsu and wrestling. They must weigh at least 150, and be 5 feet 9 inches tall. They must also pass the civil service physical examination.

INDEX

(Chapter headings are given in SMALL CAPITALS. *Numbers followed by an "A" refer to the separately paged pictorial supplement following page 262.)*

A

Abraham Baldwin Agricultural College, 218, 232, 248
Accounting, 75, 212-24, 230, 14A
Accrediting agencies, recognition of terminal education by, 34-46
Ackland, E., viii
Admission of terminal students, 190
Agricultural engineering, 110, 226, 228, 25A
Agriculture, 21, 30, 49, 56, 57, 66, 67, 72, 96, 103, 105, 106, 108, 156, 173, 174, 175, 212-24, 230, 247, 248, 4A, 5A, 6A, 25A
AIMS OF TERMINAL EDUCATION, viii, 1A-64A (following page 262)
Air conditioning, 226, 228, 15A
Alabama, 218, 249
Alabama State A. and M. Institute, 218
Albert Lea Junior College, 137, 216, 232, 250
Albia Junior College, 250
All Saints' Episcopal College, 220, 325
Alliance College, 212, 231, 234
Altoona Undergraduate Center, 252
Altus Junior College, 101, 137, 218, 230, 232, 251
Amarillo College, 222, 232
American Association of Junior Colleges, iv, 16, 34, 35, 36, 47, 85, 88, 148, 182, 190, 195
American Council on Education, 34, 35, 128
American Home Economics Association, viii, 182, 202
American Junior Colleges, 7, 11, 24, 34, 35, 39, 47, 48, 60, 68, 71, 103, 144, 182, 191, 253, 260
Amidon, E. P., 202
Anderson College, 114, 220, 252
Andrew College, 79, 218, 249
Anello, M., viii
Antelope Valley Junior College, 91, 224, 228, 234, 249
Antioch plan, 141
APPENDIXES, 211-62
Applied enginering, 22A
Aptitude tests, 166
Architecture, 213-25, 234
Arizona, 214, 249
Arizona Trade School, 172
Arizona Vocational School, 172
Arkansas, 33, 65, 214, 226, 249
Arkansas City Junior College, 214, 226, 232, 250
Arkansas Polytechnic College, 214, 232, 247
Arkansas State A. and M. College, 89, 116, 214, 232, 247, 249
Arlington Hall Junior College, 222, 235, 252
Armstrong Junior College (Calif.), 224, 230, 231
Armstrong Junior College (Ga.), 99, 137, 168, 218, 232, 249
Art, 78, 79, 113, 177, 213-25, 234, 40A, 41A. *See also* fine arts
Ashland Junior College, 250
Associate's degree, 190
Augusta, Junior College of, 218, 231, 232, 235, 249
Austin Junior College, 232
Automobile mechanics, 110, 112, 155, 226, 228, 231, 24A
Averett College, 139, 222, 252, 38A
Avery Institute, 220
Aviation, 66, 76, 77, 110, 111, 145, 155, 165, 212-24, 232, 16A-20A
Ayres, photo by, 7A

B

Bacone College, 99, 139, 218, 230, 251
Bakersfield Junior College, 141, 155, 165, 173, 189, 224, 228, 247, 26A
Baltimore, Junior College of University of, 83, 212, 232, 250
Banking, 75, 226, 228, 230
Barber-Scotia Junior College, 220, 231, 251

Bartky, J. A., 173
Bartlesville Junior College, 137, 251
Baxley's Studio, photo by, 25A
Bay City Junior College, 75, 91, 116, 137, 216, 232, 250
Beach, D., 202
Beckley College, 232
BEHIND THE COUNTER THEY GO TO COLLEGE, 148-57
Bell, B., 151
Belmont Abbey College, 220, 232
Bennett Junior College, 212
Bergen County, Junior College of, 212
Bethany Lutheran College, 99, 250
Bethel Woman's College, 116, 142, 220, 250
Bethune-Cookman College, 116, 130, 142, 173, 218, 230, 235, 249, 4A, 55A
Beulah College, 224, 231, 235
Billings Polytechnic Institute, 89, 251
Biltmore College, 220, 232
Biological science, 81, 90, 3A
Bird, G. V., 165
Bismarck Junior College, 232
Blackburn College, 142, 214, 250
Blinn College, 222, 230, 232, 235
Bloomfield Junior College, 214
Bluefield College, 222
Boas, F., 33A
Boise Junior College, ii, 73, 137, 141, 142, 157, 224, 230, 232, 234, 235, 250
Books and periodicals, 118
Bowman, H., 163
Bradford Junior College, 212
Brainerd Junior College, 137, 216, 231, 250
Brand, R. R., 19
Brawley Junior College, 224, 230, 231, 235, 249
Brevard College, 73, 220, 232, 251
Briarcliff Junior College, 212, 226
Brownsville Junior College, 222
Bucknell University Junior College, 212, 232, 252
Buehner, M., 28A
Building trades, 226, 228, 234. *See also* carpentry
Burk, J. E., ii, 85
Burlington Junior College, 137, 214, 232, 250
Burnham, W. S., photos by 20A, 21A, 24A, 27A, 42A, 47A, 56A, 59A
Business education, 19, 21, 30, 49, 56, 57, 66, 67, 74, 96, 103, 105, 106, 109, 150, 195-202, 212-24, 230, 247, 248, 7A-14A
Business Education, Department of, viii, 182
Business law, 226, 228

C

California, 7, 8, 19, 21, 24, 25, 31, 42, 52, 54, 55, 57, 58, 62, 68, 86, 104, 146, 228, 236, 237, 240, 241, 249. *See also* Western region
California Northern Hotel Association, 149
California Polytechnic School, 174
Cambridge School of Liberal Arts, 250
Cameron State Agricultural College, 218, 232
Campbell College, 139, 220, 231, 234, 235, 251
Campbell, D. S., ii, 18, 19
Campbellsville College, 220
Canal Zone, 11, 212
Canal Zone Junior College, 142, 146, 212, 231
Caney Junior College, 220
Carbon College, 77, 110, 111, 137, 224, 228, 234, 248, 252
Carl Schurz Evening Junior College, 250
Carnegie Advisory Group on Junior College Libraries, 121
Carnegie Corporation of New York, 119
Carnegie Foundation for the Advancement of Teaching, 25
Carnegie Junior College, 218, 230
Carpenter, W. W., 194
Carpentry, 111, 112, 155, 21A
Castles, J. M., 163
Catholic University of America, 35, 40
Cazenovia Seminary, 212, 235, 251
Centenary Junior College, 140, 212, 251, 39A, 59A
Centerville Junior College, 214, 232, 250
Central Arkansas, Junior Agricultural College of, 214, 247
Central College (Ark.), 89, 249
Central College (Kan.), 214, 250
Central Junior College (Calif.), 224, 231, 232, 247

Central office studies, 191
Central Wesleyan College, 251
Centralia Junior College, 224, 232, 252
Chaffee, E. B., ii
Chaffey Junior College, 21, 133, 142, 174, 224, 228, 247, 249, 18A
Chamberlayne Junior College, 212, 226, 235, 46A, 61A
Chamlee, Red, 6A
Chanute Junior College, 78, 111, 142, 216, 232, 234, 250
Charters, W. W., 162
Chekhov, vii
Chemical engineering, 213-25, 14A
Chevy Chase Junior College, 212
Chicago junior colleges, ii, 75, 87, 90, 125, 131, 138, 170, 172. *See also* Herzl, Woodrow Wilson, Wright junior colleges
Chicago, University of, 15
Chowan Junior College, 220, 231
Christensen, A., 24
Christian College, 82, 142, 216, 235, 251
Cincinnati, University of, 141
Cisco Junior College, 232
Citizenship, 178
Citrus Junior College, 96, 133, 224, 247, 249
Civic health, 227, 229
Civil Aeronautics Authority, 66, 77, 145
Civil engineering, 213-25
Civil service, 227, 229
Clarendon Junior College, 222
Clark, A., 179
Clark, E., photo by, 32A
Clark Junior College, 224, 232, 252
Clary, Robert, photo by, 33A
Clientele, nature of, 135
Clifton Junior College, 232
Clinics, 178
Cloud, A. J., 154, 161, 194
Coalinga Extension Center, 77, 89, 97, 137, 142, 224, 228, 232, 247, 249
Coffeyville Junior College, 132, 216, 232, 234
Cogswell Polytechnical College, 15A, 22A, 23A, 30A
Colby Junior College, 83, 132, 179, 212, 251, 51A, 52A
Collins, P., photos by, 26A
Colorado, 32, 65, 214, 249
Colorado Woman's College, 89, 99, 113, 214, 231, 234, 249, 8A, 35A, 41A, 55A
Columbia Junior College, 140, 212, 231, 235, 250
Columbus University Junior College, 249
Colvert, C. C., ii, 22, 23
Commerce. *See* business education
Commerce, Junior College of, 140, 212, 249
Commercial Photo, 36A
Commission on Junior College Terminal Education, ii, v, vii, viii, 180, 188
Committees, cooperating, 140
Commonwealth Fund, 17
COMMUNITY AND TERMINAL EDUCATION, THE, 134-43
Community committees, 170
Community needs, 161
Community resources, 167
Community served, nature of, 134
Community surveys, 135
Compton Junior College, 224, 228, 247, 16A, 17A
Conception Junior College, 140, 251
Concordia College (Minn.), 216, 232
Concordia Collegiate Institute, 212, 231, 251
Conference groups, 184, 187
Conley, W. H., 88, 195
Connecticut, 32, 42, 63, 64, 212, 226, 249
Connecticut, Junior College of, 141, 212, 230, 231, 232, 234
Connors State Agricultural College, 218, 232
Consultants, use of, 162
Consumer education, 88, 89, 163
Construction engineering, 78
Continuation of junior college students, 240, 241
Continuation training, 170
Cooperating committees, 140
Cooperating junior colleges, 249-52
Cooperative method, 98, 141, 148-57, 164
Cooperative Study of Secondary School Standards, 139
Copiah-Lincoln Junior College, 251
Core curriculum, 85, 172
Corpus Christi Junior College, 222, 232, 235

Cosmetology, 85, 117, 227, 229, 235
Costume design, 113, 177, 229, 234, 46A, 47A, 48A
Cottey Junior College, 216, 251
Coulter Memorial Junior College, 220, 235
Cox, R. G., 19A
Crosby-Ironton Junior College, 216, 250
Cultural arts, 2A
Cultural terminal curricula. *See* General terminal curricula
Cumberland College, 220, 231, 235
Cumnock Junior College, 249
CURRICULA AND ENROLLMENTS, TERMINAL, 47-70
Curricular givings, 23
Curricular offerings, 20
Curricular takings, 24
Cushman, F., 27
Custer County Junior College, 232, 251

D

David Lipscomb College, 222, 64A
DeBrum, J., 195
Decatur Baptist College, 222, 235
Definitions, 14
Degree, associate, 190
Degrees held, highest, 102
Delta Psi Omega, 35A
Dental assistants, 114, 157, 49A, 50A
Department of Business Education, viii, 182
DEVELOPMENT OF TERMINAL EDUCATION, 14-26
Distributive occupations, 30
District of Columbia, 212, 226, 249
Diversified occupations, 171
Dixie Junior College, 137, 224, 231, 232, 234, 248, 252
Dodd College, 220, 235
Dodge City Junior College, 89, 142, 154, 216, 232, 250
Douglass, A. A., ii, 195
Dowling College, 214, 231, 232
Drafting, 76, 227, 229, 234, 17A, 27A
Dramatics, 78, 79, 80, 113, 168, 213-25, 234, 33A-36A
Drop-outs and terminal enrollments, 59-65, 240, 241
DuBois Undergraduate Center, 252
Duluth Junior College, 216, 226, 231, 250
Dunbar Junior College, 137, 141, 214, 249
Duncan Junior College, 218, 231, 251

E

Eagle Grove Junior College, 214, 231, 250
East Central Junior College, 220, 232, 251
East Mississippi Junior College, 251
Eastern Mennonite School, 222, 230
Eastern New Mexico College, 89, 142, 157, 232, 251
Eastern Oklahoma A. and M. College, 218, 231, 232
Edinburg Junior College, 138, 222, 232, 252
Educators, judgments of, 193
Eells, W. C., ii, iii, vi, viii, 1, 4, 7, 18, 19, 22, 23, 25, 34, 47, 66, 71, 85, 103, 121, 133, 136, 144, 145, 182, 194, 195, 232
Eikenberry, D. H., 195
El Dorado Junior College (Kan.), 216, 226
El Reno Junior College, 218, 251
Electrical engineering, 78, 110, 213-25, 234
Elkader Junior College, 214, 226, 231
Ellsworth Junior College, 214, 230, 232, 250
Ely Junior College, 216, 231, 232, 250
Emmetsburg Junior College, 214
Engineering and technology, 49, 56, 57, 67, 76, 96, 103, 105, 106, 110, 111, 212-24, 231, 14A-31A
—agricultural, 110, 226, 228, 25A
—applied, 22A
—aviation. *See* Aviation
—chemical, 213-25, 14A
—civil, 213-25
—construction, 78. *See also* Building trades, carpentry
—electrical, 78, 110, 213-25, 234
—mechanical, 78, 213-25, 234. *See also* Air conditioning
—mining, 227, 229
—plant, 21A
—radio, 213-25, 234. *See also* Radio
Engleman, L. E., 25, 85, 133, 195
ENROLLMENTS, TERMINAL CURRICULA AND, 47-70
Equipment, 185

EQUIPMENT FOR TERMINAL CURRICULA, 108-17
Essex Junior College, 140, 251
Estherville Junior College, 138, 214, 232, 250
Evanston Collegiate Institute, 214, 250
Eveleth Junior College, 138, 216, 231, 232, 234, 235, 250

F

Fairfax Hall Junior College, 222, 252
Fairmont Junior College, 84, 249
Family relationships, 82, 83
Farms, size of, 108
Fashion illustration, 227, 229, 234
Federal aid, 27, 144, 145, 244
Federal authorization, 27
Ferris Institute Junior College, 232
Ferry Hall, 250
Financial support, 75, 144-47, 185, 226, 228, 230
FINANCING TERMINAL EDUCATION, 144-47
Finch Junior College, 80, 113, 114, 115, 212, 226, 251, 33A, 37A, 54A
Fine arts, 49, 56, 58, 67, 78, 96, 103, 105, 106, 113, 234, 31A-48A. *See also* Art, Dramatics, Music, Photography
Fisher, G., 202
Fisk, McKee, 195, 196
Flat River, Junior College of, 216, 231, 235
Flint Junior College, 216, 226, 232
Floriculture, 226, 228, 230, 5A
Florida, 33, 218, 249
Florida Normal and Industrial Institute, 218, 249
Follow-up studies, 131, 243
Ford Motor Company, 138
Fordson Junior College, 138, 142, 216, 232, 235, 250
Forestry, 73, 157, 212-24, 230, 6A
FOREWORD, v-vi
Forkner, H. L., viii, 182, 195
Forms used, 253-62
Fornonzini, B. A., Jr., 150
Fort Dodge Junior College, 214, 232, 250
Fort Lewis Junior College, 248
Fort Scott Junior College, 232
Fort Smith Junior College, 214, 226, 232
Fort Valley State College, 218
Frances Shimer Junior College, 250
Freed-Hardeman College, 222, 226
Freeman Junior College, 252
Fresno City Junior College, 15, 16, 224, 232, 235, 247
Friendship Junior College, 220, 235, 252
Fullerton Junior College, 21, 69, 75, 89, 132, 138, 224, 228, 235, 247, 249
Full-time vs. part-time instructors, 105
Functions of the junior college, 18

G

Gainesville Junior College, 222, 231, 232, 235
Garden City Junior College, 216, 232, 250
Garland School, 89, 115, 142, 151, 176, 177, 250, 34A, 45A, 48A, 57A, 58A
Garrison, L. A., 104
Gary College, 232
General cultural curricula, 20, 30, 49, 50, 56, 57, 67, 85, 212-24, 230, 3A
General Education Board, v, vi, vii, 158, 182, 188
Geology, 227, 229
George-Deen act, 27, 144, 246-48
Georgetown Visitation Junior College, 115, 212, 226, 234, 235, 249
Georgia, 33, 38, 39, 43, 65, 218, 226, 249
Georgia Military College, 218, 230, 232
Georgia Southwestern College, 116, 138, 142, 218, 231, 232, 249
Giffin College, 143, 232, 251
Gila Junior College, 89, 214, 230, 232, 247, 249
Glendale Junior College, 89, 91, 111, 113, 114, 138, 142, 144, 153, 224, 228, 231, 234, 247, 249, 11A, 15A, 53A, 58A
Goddard College, 140, 143, 152, 252
Gogebic Junior College, 138, 142, 216, 232, 234, 250
Goodspeed, B., photo by, 41A
Gordon Military College, 218, 230, 232, 249
Graceland College, 214, 226, 235, 250
Graham, R., 202
Grand Rapids Junior College, 216, 230, 231, 232, 234, 235
Grand View College, 214, 235

Grant, P., photos by, 31A, 32A
Gray, M. E., 202
Grays Harbor Junior College, 140, 224, 228, 252
Green Mountain Junior College, 89, 129, 140, 212, 232, 252, 60A, 61A
Greenbrier College, 218
Greenhouse practice, 73
Grover Cleveland High School, 171
Guidance and personnel data, 243
Guidance function, 18, 163, 165, 184
GUIDANCE ORGANIZATION, PERSONNEL AND, 122-33
Gulf Park College, 113, 114, 115, 125, 220, 226, 251, 19A

H

Hannibal-La Grange College, 216
Harbeson, J. W., 194
Hardin Junior College, 128, 138, 222, 232, 252
Harper, W. R., 15
Harris, J. A., 202
Harrison-Stone-Jackson Junior College, 220, 251
Health, civic, 227, 229
Health services, 49, 56, 58, 67, 80, 96, 103, 105, 106, 114, 227, 229, 235, 49A-54A
Hebron Junior College, 218, 232, 251
Heilbron, K., photos by, 4A, 55A
Hershey Junior College, 89, 143, 167, 212, 252
Herzl Junior College, 115, 125, 142, 157, 214, 226, 231, 232, 234, 250. *See also* Chicago junior colleges
Hesston College, 214, 235
Hiatt, L. R., 23
Hibbing Junior College, 216, 232, 250
Highland Junior College, 115, 142, 216, 250
Highland Park Junior College, 216, 230, 232, 250
Hill, M. E., 21
Hillman College, 220
Hillsboro Junior College, 143, 222, 252
Hillyer Junior College, 75, 89, 142, 150, 212, 230, 249, 7A, 11A, 21A
Hinds Junior College, 142, 156, 232
Historical development, 7
Hiwassee College, 222, 252
Hjorth, E., 162
Hockaday Junior College, 222, 61A
Hollingsworth, J. E., 22, 23
Hollinshead, B. S., ii, iii, vii, 158
Holmes Junior College, 220, 230
Holton-Arms Junior College, 212, 249
Home economics, 21, 30, 49, 56, 58, 66, 67, 82, 96, 103, 105, 106, 115, 162, 176, 202-10, 213-25, 235, 247, 248, 54A-59A
Hood, J. E., photo by, 35A
Hosiery mill, 101, 113, 146
Hotel and restaurant management, 149, 161, 226, 228, 231, 12A, 13A
House planning, 57A
Houston, University of, 178
Humanities, 90
Hutchinson Junior College, 216, 232, 235

I

Idaho, 33, 228, 250
Idaho, Southern Branch of University of, 110, 111, 116, 117, 142, 224, 228, 232, 248, 250
Illinois, 7, 8, 33, 65, 214, 226, 250
Increase in publications, 25
Independence Junior College (Iowa), 250
Independence Junior College (Kan.), 216, 232
Indian junior college, 99, 139 *See also* Bacone College
Indiana, 214
Industrial arts, 78
Information blanks, 254-62
Ingalls, R. C., ii, 157
In-service training, 172
Institute for Consumer Education, 88
Institutional studies, 191
Instruction, special methods of, 97
INSTRUCTIONAL STAFF FOR TERMINAL CURRICULA, 102-07
Instructors, experience, 242
Insurance, 75, 154, 212-24
Interior decoration, 227, 229, 234, 45A
INTRODUCTION, vii-viii
Iola Junior College, 214, 235
Iowa, 33, 64, 214, 226, 250
Iowa, University of, 16
Itasca Junior College, 216, 226, 232, 250

J

Jackson Junior College, 89, 138, 216, 232, 250
Jarvie, L. L., 172

Jefferson City Junior College, 216, 232, 251
Jernigan Photo Service, 18A
Job opportunities, 131
John McNeese Junior College, 232
John Tarleton Agricultural College, 21, 78, 108, 111, 222, 232, 248, 252, 5A, 25A
Johnson, B. L., 162, 163
Johnson Studio, 24A
Johnstown Center, University of Pittsburgh, 252
Jones County Junior College, 101, 113, 146, 220, 232, 251
Joplin Junior College, 74, 216, 226, 230, 231, 232, 234, 235, 251
Journalism, 49, 56, 58, 67, 83, 96, 103, 105, 106, 116, 157, 213-25
Judgment, student, 194
Judgments of educators and laymen, 193
JUNIOR COLLEGE MOVEMENT, PRESENT STATUS OF, 1-13
Junior colleges
—classes, 12
—control, 1, 11, 53, 56, 60, 238, 239
—denominational, 11
—enrollment, 3, 6, 9, 24
—faculty, 3, 12
—Negro, 53, 54-58, 60, 137, 173, 238, 239
—number, 3, 6, 8
—private, 1, 4, 5, 22, 52, 53, 56, 60, 61, 139, 184, 187, 238, 239
—public, 1, 4, 5, 21, 52, 53, 56, 60, 61, 137, 184, 186, 238, 239
—race, 1, 12
—region, 1, 3, 6, 52, 53, 54, 56, 60, 238, 239
—sex of students, 1, 12, 53, 56, 60, 238, 239
—size, 1, 10, 53, 56, 60, 238, 239
—states, 7, 52, 54
—type, 1, 12, 52, 53, 54, 56, 60, 238, 239

K

Kansas, 19, 27, 33, 36, 43, 64, 214, 226, 250
Kansas City Junior College (Kan.), 216, 230, 232
Kansas City, Junior College of (Mo.), 125, 216, 230, 231, 233, 251
Kelly, F. J., 33
Kemp, W. W., 21
Kemper Military School, 125, 216, 233, 251
Kentucky, 33, 64, 220, 250
Kesch, S., 169
Kilgore College, 138, 222, 233, 234, 252
Kiowa County Junior College, 218, 233, 251
Kokomo Junior College, 214
Koos, L. V., ii, 17, 18, 22, 23, 24

L

Laboratory technology, 227, 229, 235, 54A
Lamar College, 222, 233, 252
Langley, W., photo by, 61A
Larson Junior College, 212, 226, 230, 234, 235, 53A
La Salle-Peru-Oglesby Junior College, 142, 214, 233, 250
Lasell Junior College, ii, 20, 113, 115, 116, 140, 142, 150, 151, 177, 212, 226, 234, 250, 36A, 47A
La Sierra College, 116, 224, 249
Lassen Junior College, 142, 157, 224, 233, 234, 247, 6A
Laundry management, 85
Laymen, judgments of, 193
Lee Junior College, 222, 233
Lees Junior College, 220
Lees-McRae College, 140, 143, 220, 251
Legal courses, 81
LEGAL STATUS OF TERMINAL EDUCATION, 27-33
Lembke, G. L., 170
"Less than college grade," 29
Lester, R. M., 119
Leuenberger, H. W., 194
Librarianship, 83, 84, 213-25
LIBRARY IN TERMINAL EDUCATION, THE, 118-21
Lincoln, College (Ill.), 214
Lincoln Junior College (Mo.), 216
Lindbergh, A. M., vii
Lindsay, F. B., 25
Lindsey Wilson Junior College, 220, 230
Literature of Junior College Terminal Education, v, 25, 85, 133, 180
Little Rock Junior College, 79, 114, 214, 233, 249

Lon Morris College, 233
Long Beach Junior College, 69, 83, 89, 142, 152, 224, 228, 233, 247, 249, 10A, 14A, 28A, 29A
Loomis, B. W., 17
Los Angeles City College, ii, 69, 82, 84, 85, 93, 94, 97, 111, 113, 114, 116, 129, 132, 141, 142, 157, 170, 189, 224, 228, 247, 249, 262, 1A, 2A, 9A, 31A, 32A, 37A
Los Angeles Pacific College, 224, 234, 235
Louisburg College, 132, 220, 230, 251
Louisiana, 220
Lower Columbia Junior College, 224, 233, 252
Luther College, 218
Lux Technical Institute, 224
Lyons Township Junior College, 214, 233, 250

M

Machine shop, 111
Machines, computing, 109
Maine, 33, 212, 250
Maine Township Junior College, 233
MAJOR PROBLEMS OF TERMINAL EDUCATION FOR FURTHER STUDY, 180-210
MAJOR TERMINAL EDUCATIONAL FIELDS, 71-101
Management, 226, 228
Mangum Junior College, 233
Marion College, 222, 226
Marion Institute, 218
Marriage and the family, 162
Mars Hill College, 125, 220, 251, 8A
Marsh, W. C., 154
Marshall, J. A., 202
Marshall, College of, 222, 233
Marshalltown Junior College, 214, 233, 250
Mary Allen Junior College, 222, 230
Maryland, 39, 43, 93, 94, 212, 250
Marymount College, 224, 231, 235
Mason, E. F., iii, viii, 148, 1A
Mason City Junior College, 233
Massachusetts, 212, 226, 250
McCaskill, J. L., 156
McCook Junior College, 96, 142, 218, 226, 251
McDowell, F. M., 16, 17, 21, 22, 23
McLane, C. L., 15, 16
McNeal, W. B., 202
McPhee, J. A., 174
Mechanical engineering, 78, 213-25, 234
Medical secretary, 81, 96, 115, 156, 157, 213-25, 235, 51A, 52A
Medical technician, 53A
Medsker, L. L., ii
Menlo Junior College, 224
Merchandising, 75, 150-53, 177, 226, 228, 231, 10A
Meridian Junior College, 142, 156, 171, 220, 233
Mesa County Junior College, 214, 230, 233, 235, 248
Messiah Bible College, 140, 252
Methodist Church, University Senate of, 35, 36, 40
Methods of instruction, special, 97
Metzger-Farmington, photo by, 21A
Michigan, 33, 64, 216, 226, 250
Michigan, University of, Library, 119, 120
Middle Georgia College, 218, 233
Middle States region, 2, 34, 36, 41, 52, 54, 57, 58, 62, 63, 212, 226, 236, 237, 240, 241
Military service, 227, 229
Mining, 227, 229
Minnesota, 33, 64, 216, 226, 250
Miscellaneous terminal curricula, 49, 56, 67, 85, 117, 64A
Mississippi, 32, 33, 44, 65, 132, 220, 226, 251
Missouri, 33, 64, 216, 226, 251
Mitchell College, 220
Moberly Junior College, 216, 233
Modesto Evening Junior College, 247
Modesto Junior College, 77, 89, 100, 110, 111, 114, 138, 141, 142, 144, 155, 156, 224, 228, 230, 231, 234, 247, 249, 4A, 44A, 57A
Moehlman, A. B., 138
Monett Junior College, 138, 216, 233, 251
Monographs in special fields, 191
Montana, 2, 33, 39, 44, 251
Monte Cassino Junior College, 251
Montgomery, E. W., 172
Monticello College, 214, 250
Montreat College, 220, 230
Morecock, Mr., 164
Morgan Park Junior College, 214
Morgan, W. L., 202
Morris Junior College, 86, 89, 99, 140, 233, 251

Morristown Normal and Industrial Junior College, 222
Morse Junior College, 249
Morton Junior College, 142, 214, 231, 235, 250
Mortuary science, 85, 213-25
Moulin, G., photos by, 5A, 30A
Mount Aloysius Junior College, 86, 252, 54A
Mount Marty Junior College, 218
Mount Mercy Junior College, 214, 250
Mount St. Agnes Junior College, 142, 212, 235, 250
Mount St. Clare Junior College, 214, 231
Mount St. Joseph Junior College, 220, 230, 231, 235
Mount Vernon Junior College, 224, 231, 233
Mount Vernon Seminary, 212, 226, 231, 249
Multnomah College, 24, 233
Murray State School of Agriculture, 218, 230, 233, 251
Muscatine Junior College, 214, 233, 235, 250
Music, 21, 78, 79, 96, 114, 213-25, 234, 38A, 39A. *See also* Fine arts
Muskegon Junior College, 216, 233, 250
Muskogee Junior College, 218, 231, 234, 251

N

National Education Association, viii, 15, 182
National Park College, 100, 113, 114, 115, 212, 250
Nature of clientele, 135
Nature of community served, 134
Navigation, 227, 229, 28A, 29A
Nazareth Junior College, 220
Nebraska, 32, 33, 44, 218, 226, 251
New developments, keeping up with, 106
New England region, 2, 34, 38, 39, 40, 52, 54, 57, 58, 62, 63, 132, 176, 212, 226, 236, 237, 240, 241
New Hampshire, 32, 45, 212, 251
New Haven YMCA Junior College, 78, 91, 212, 249
New Jersey, 212, 251
New London Junior College, 99
New Mexico, 33, 218, 251
New Mexico Military Institute, 218, 233, 251
New York, 45, 212, 226, 251
Newton, W. L., 171
Nichols Junior College, 212, 233
Noffsinger, H. G., 16
Nonvocational subjects, required, 89
Norfolk Division, College of William and Mary, 233
Norman Junior College, 218, 235, 248
North Carolina, 45, 65, 220, 251
North Central region, 2, 34, 36, 41, 52, 54, 57, 58, 62, 214, 226, 236, 237, 240, 241
North Dakota, 33, 218, 226, 251
North Dakota School of Forestry, 73, 218, 226, 248, 251
North Dakota State Normal Industrial School, 248
North Dakota State School of Science, 143, 156, 218, 248, 18A, 24A
North Georgia College, 218, 249
North Greenville Junior College, 220
North Idaho Junior College, 233
North Park College, 214, 250, 64A
North Texas Junior Agricultural College, 21, 110, 111, 113, 143, 156, 222, 231, 248, 252, 16A, 18A
Northeast Junior College, ii, 220, 233
Northeastern Oklahoma Junior College, 111, 218, 231, 248, 251
Northern Montana College, 142, 156, 224, 233, 234, 251
Northwest region, 2, 34, 36, 42, 52, 54, 57, 58, 62, 63, 224, 236, 237, 240, 241
Northwestern Junior College, 214
Notre Dame Junior College (Mo.), 216, 235
Notre Dame Junior College (S.D.), 218
Nursing, 80, 81, 115, 213-25, 53A
NYA projects, 165

O

Oak Ridge Military Institute, 220
Occupational experience of instructors, 105, 242
Occupational experience, teaching and, 104
Occupational fields of parents, 135
Occupational information, 243
Occupations, information on, 130

Oceanside-Carlsbad Junior College, 72, 89, 114, 138, 142, 224, 233, 234, 249
O'Connor, E. M., 177
Offerings, unusual, 98
Ogontz Junior College, 212
Ohio, 218, 251
Oil technology, 21, 155, 227, 229, 234, 26A
Oklahoma, 45, 65, 218, 251
Oklahoma Military Academy, 233
Okmulgee Junior College, 218, 233, 234, 251
Okolona Industrial School, 220, 248
Opportunity School, Denver, 166
Ordnance, 27A
Oregon, 251
Osceola Junior College, 250
Ottumwa Heights College, 81, 115, 116, 142, 214, 250
Our Lady of Victory College, 222

P

Packard, D., viii
Packard School, 251
Packer Collegiate Institute, 212, 251
Paducah Junior College, 220
Palm Beach Junior College, 218, 233, 248, 249
Paola, College of, 116, 216, 231, 234, 235, 250
Paris Junior College, 222, 230, 231, 233, 248, 250
Parish secretary, 227, 229
Parker, K. P., 177
Parsons Junior College, 233, 248, 250
Part-time instructors, full-time vs., 105
Pasadena Junior College, 69, 89, 110, 125, 131, 138, 141, 142, 170, 190, 224, 228, 234, 235, 247, 249
Peabody College, 18
Peace Junior College, 220, 251
Peace officers, 83, 85. *See also* Police officers
Pearl River Junior College, 220, 233, 251
Penn Hall Junior College, 212, 234
Pennsylvania, 32, 46, 64, 212, 226, 252
Periodicals, 118
PERSONAL OBSERVATIONS ON TERMINAL EDUCATION IN SELECTED JUNIOR COLLEGES, 158-79
PERSONNEL AND GUIDANCE ORGANIZATION, 122-33
Personnel data, 243
Pfeiffer Junior College, 143, 220, 230, 251
Philosophy of education, 190
Phoenix Junior College, 19, 73, 89, 139, 141, 144, 172, 214, 230, 231, 247, 249
Photographic representation, 71
Photography, 78, 79, 114, 213-25, 234, 42A-44A
Physical education, 83, 84, 213-25, 235, 59A-61A
Physical sciences, 90, 3A
Physical Therapy, Junior College of, 80, 82, 142, 212, 226, 227, 229, 249
Pikeville College, 116, 220, 250
Pine Manor Junior College, 82, 89, 212, 250
Placement, 169
Placer Junior College, 224, 228, 231, 233
Plant engineering, 21A
Police officers, 83, 85, 116, 227, 229, 235, 63A
Pomona Junior College, 110, 139, 224, 230, 234, 247, 249
Pontiac photo, 64A
Popularizing function, 18
Port Huron Junior College, 216, 233, 250
Porterville Junior College, 224, 233, 234
Portland Junior College, 89, 250
Portland Junior Technical College, 140, 250
Potomac State School, 109, 218, 226, 248, 252
Power machine operation, 59A
Pratt Junior College, 216, 233
Preparatory function, 18
Presbyterian Junior College, 220, 251
Present Status of Junior College Terminal Education, v
PRESENT STATUS OF THE JUNIOR COLLEGE MOVEMENT, 1-13
Presentation Junior College, 216
Printing, 85, 111, 112, 227, 229, 64A
Problems of terminal education, 180-210
Proctor, M. D., 40
Proctor, W. M., 18, 19
Public health, 82
Public service, 49, 56, 58, 67, 83, 96, 103, 105, 106, 116, 235, 59A-63A

Publications, increase in, 25
Pueblo Junior College, 89, 139, 142, 154, 214, 230, 233, 249

R

Rabun Gap-Nacoochee School, 249
Radio, 111, 213-25, 234, 30A-32A
Radio engineering, 234
Ranger Junior College, 139, 222, 226, 230, 231, 233, 252
Ratcliffe, E. B., 36
Reading, 163
RECOGNITION OF TERMINAL EDUCATION BY ACCREDITING AGENCIES, 34-46
Recreational leadership, 83, 84, 116, 157, 213-25, 235, 62A, 63A
Red Oak Junior College, 214, 233
Reedley Junior College, 224, 231, 233, 234
Regional associations, 2, 34
Regional conferences, 181
Reid, J. R., 25
Reidy, D. W., 170
Reinhardt College, 218, 230, 235, 248
Religious education, 213-25, 227, 229, 64A
Required nonvocational subjects, 89
Retail selling, 11A
Rhoads, M. E., photo by, 41A
Ricker Junior College, 212
Ringling Junior College, 233
Rio Grande College, 218, 231, 233, 234, 235
Rittase, W. M., photos by, 34A, 45A, 48A, 57A, 58A
Riverside Junior College, 139, 141, 142, 154, 224, 228, 247, 249
Rochester Athenaeum and Mechanics Institute, 162, 164, 165, 172, 190
Rochester Junior College, 139, 142, 149, 216, 226, 231, 233, 250

S

Sacramento Junior College, 79, 91, 110, 116, 117, 125, 132, 133, 139, 142, 224, 228, 231, 235, 247, 249
Sacred Heart College (Ky.), 220
Sacred Heart Junior College (Kan.), 216, 250
Sacred Heart Junior College (N.C.), 220
Saint Catharine Junior College, 220
Saint Genevieve-of-the-Pines Junior College, 220, 251
Saint Helen's Hall Junior College, 224, 231, 235, 251
Saint John's College, 216, 226, 250
Saint Joseph Junior College, 142, 216, 233, 251
Saint Joseph's College, 214, 233
Saint Louis, junior college conference at, 16
Saint Mary's Female Seminary-Junior College, 86, 140, 142, 157, 212, 235, 250
Saint Mary's Junior College (N.C.), 251
Saint Petersburg Junior College, 218, 230, 231, 233
Saint Philip's Junior College, 222, 230, 235, 252
Saint Thomas Seminary, 249
Salesmanship, 150, 212-24, 231, 11A
Salinas Evening Junior College, 89, 139, 141, 247, 249
Salinas Junior College, 89, 139, 142, 154, 224, 228, 247, 249
San Angelo College, 222, 233, 252
San Antonio Junior College, 222, 233, 252
San Benito County Junior College, 224, 228
San Bernardino Valley Junior College, 110, 114, 133, 142, 144, 224, 231, 233, 247, 249
San Diego Junior College, 142, 233
San Diego Vocational Junior College, 247
San Francisco Junior College, 70, 75, 142, 148, 149, 154, 161, 190, 224, 228, 231, 233, 234, 235, 247, 5A, 12A, 13A, 30A
San Jose Junior College, 99
San Luis Obispo Junior College, 233, 247
San Mateo Junior College, 89, 100, 111, 133, 141, 142, 155, 224, 228, 247, 249
Santa Ana Junior College, 224, 228, 247
Santa Maria Junior College, 224, 228, 247
Santa Monica Junior College, 224, 230, 231, 233, 234
Santa Rosa Junior College, 142, 224, 230, 231, 233, 235
Sapulpa Junior College, 218, 230, 233, 251

Sayre Junior College, 218, 231
Schiferl, M., iii, vii, 47, 71
Schreiner Institute, 222, 233, 252
Schuszler, A., photos by, 9A, 36A, 42A, 43A
Schuylkill Undergraduate Center, 252
Scott, D. C., 202
Scottsbluff Junior College, 81, 131, 218, 233, 251
Scranton-Keystone Junior College, ii, 81, 96, 115, 140, 141, 143, 156, 157, 158, 190, 212, 226, 231, 233, 252, 20A, 56A
Seaton, J. L., 36
Secretarial, 74, 75, 81, 212-24, 231, 8A, 9A
Seminole Junior College, 218, 235
Semiprofessional curricula, 20, 92. *See also* Vocational curricula
Separation of students, 87
Sheldon Junior College, 214, 233
Shenandoah College, 222
Shepherd, H. D., 195
Shobb, T., photo by, 57A
Shofstall, W. P., 163
Shop courses, 76, 77
Simpson, R., 202
Sloan Foundation, Alfred P., 88, 163
Smith, L. W., 15
Smith-Hughes, 27, 29, 144, 145, 172, 244-48
Snead Junior College, 141, 218, 230, 249
Snow College, 224, 228, 233, 248, 252
Snyder, L. M., 132
Social science, 90
Social service, 83, 84, 213-25
Sources of information, 48
South Carolina, 33, 220, 252
South Dakota, 33, 218, 252
South Georgia College, 218
South Jersey, College of, 212, 230
Southeastern Colorado, Junior College of, 214, 230, 231, 248
Southern Christian Institute, 220, 235
Southern Junior College, 89, 222, 230, 235, 252
Southern region, 2, 34, 36, 38, 39, 42, 57, 58, 62, 218, 226, 236, 237, 240, 241
Southern Seminary and Junior College, 113, 116, 222, 231, 235, 252
Southwest Baptist College, 216, 226
Southwest Mississippi Junior College, 220, 251
Spafford, I., viii, 182, 202
Special features, 98
Speech, 78, 79, 80, 213-25, 234
Spokane Junior College, 224, 233, 234, 252
Sponagel, A., photo by, 12A
Spring Arbor Seminary and Junior College, 216, 230, 231
Springfield Junior College, 214, 233, 250
Staff, 185
Standard Oil Company, 26A
Stanford University, 18
State and local financing, 146
State authorization, 31
Steen, T. W., 140
Stephens College, 88, 89, 142, 162, 163, 216, 230, 251
Stillman Institute, 218
Stockton Evening Junior College, 249
Stockton Junior College, 89, 139, 224, 228, 230, 231, 234
Stoneleigh College, 80, 89, 142, 152, 251, 9A, 36A, 41A, 42A, 43A
Stowe Teachers College, Junior College of, 251
Stratford College, 222, 252
Student information, 243
Student judgment, 190, 194
Students
—information about individual, 126
—separation of, 87
—transfer of terminal, 190
Sue Bennett College, 220
Sullens, Z., 163
Sullins College, 222, 44A, 60A
Sullivan, J. G., 162
Sunflower Junior College, 220, 233, 251
Survey courses, 86
Surveys, community, 135
Suzzallo, H., 25
Swanson, E. A., 195
Swift Memorial Junior College, 222

T

TABLE OF CONTENTS, ix
Tabor College, 216, 250
Taft Junior College, 141, 142, 224, 228, 247, 249
Taylor, V. W., photos by, 7A, 8A, 35A, 55A

Teacher training, 30, 33, 83, 84, 213-25, 235, 247, 248. *See also* Public service
Teaching and occupational experience, 104
Teaching experience of instructors, 242
Temple Junior College, 222, 230, 233, 235, 252
Tennessee, 33, 64, 222, 226, 252
Tennessee Junior College, University of, 222, 226, 233, 25A
Tennessee Wesleyan College, 140, 222, 252
TERMINAL CURRICULA AND ENROLLMENTS, 47-70
TERMINAL CURRICULA, EQUIPMENT FOR, 108-17
TERMINAL CURRICULA, INSTRUCTIONAL STAFF FOR, 102-07
Terminal education
—adequacy of, 59
—curricula offered, 47-70, 236, 237
—definitions, 14
—enrollments in, 47-70
—first used, 35
—institutions offering, 52, 68, 238, 239
—percentage composition of, 92
—purposes, 15, 18
—recognition of, 15
—relation of drop-outs to, 59-65
—terminology for, 38
TERMINAL EDUCATION, FINANCING, 144-47
TERMINAL EDUCATION, LEGAL STATUS OF, 27-33
TERMINAL EDUCATION, MAJOR PROBLEMS OF FOR FURTHER STUDY, 180-210
TERMINAL EDUCATION, RECOGNITION OF BY ACCREDITING AGENCIES, 34-46
TERMINAL EDUCATION, THE COMMUNITY AND, 134-43
TERMINAL EDUCATION, THE LIBRARY IN, 118-21
TERMINAL EDUCATIONAL FIELDS, MAJOR, 71-101
Testing, 165
Tests used, 128, 166, 167
Texarkana College, 125, 129, 139, 222, 230, 233, 234, 252
Texas, 7, 8, 21, 24, 25, 33, 65, 222, 226, 252
Texas Lutheran College, 222, 233, 252
Texas Military College, 222, 235, 252
Thomas, F. W., 18
Thomason, C. C., 164
Thompson, W. H., 132
Thornton Junior College, 214, 231, 233, 235
Tilton Junior College, 212, 251
Tipton Junior College, 214, 231
Toledo Junior College, University of, 251
Tracy Junior College, 89, 216, 250
Trades and industries, 30, 247, 248
Transfer of terminal students, 190
Travel agents, 85
Trenton Junior College, 216
Trevacca Nazarene College, 222, 226
Trinidad State Junior College, 144, 233, 248, 249
Tyler, R., 164
Tyler Junior College, 222, 230, 233
Typewriters, 109
Typewriting, personal, 74

U

United States Office of Education, 27-31, 33, 36, 84
University Junior College, 89, 143, 218, 233, 248, 251
University of Tennessee Junior College, 222, 226, 233, 25A
University Senate of the Methodist Church, 35, 36, 40
Urbana Junior College, 251
Utah, 65, 77, 91, 228, 252
Utah, Branch Agricultural College of, 233, 248

V

Valley Forge Military Junior College, 129, 212, 252
Ventura Evening Junior College, 247
Ventura Junior College, 224, 231, 234, 247
Vermont, 33, 212, 252
Vermont Junior College, 143, 152, 212, 252
Victoria Junior College, 222, 230, 231, 233, 235, 252
Vincennes University Junior College, 214, 233
Virginia, 33, 64, 222, 226, 252
Virginia Intermont College, 125, 222, 252
Virginia Junior College, 100, 216, 226, 231, 233, 251

Visalia Junior College, 224, 231, 233, 247
Visual education, 169
Vocational curricula, 20, 30. *See also* Semiprofessional curricula
Vocational guidance, 122

W

Wahlquist, J. T., 103, 104
Waldorf College, 214, 231, 233, 235, 250
Walker, K. P., 132
Walker, M., 202
Walker Junior College, 249
Ward-Belmont School, ii, 85, 86, 222, 235, 252, 32A, 35A, 36A
Washington, 63, 65, 228, 252
Washington Junior College, 214, 233, 235, 250
Watson, H., 162
Waukon Junior College, 214, 231, 250
Wave of the Future, vii
Wayland Baptist College, 222, 233, 252
Wayland Junior College, 252
Weatherford College, 222
Weaving, 57A
Weber College, 70, 89, 131, 132, 139, 143, 155, 190, 224, 228, 233, 234, 248, 252, 20A, 21A, 24A, 27A, 42A, 47A, 56A, 59A
Webster City Junior College, 139, 214, 250
Weersing, F. J., 24
Welding, 227, 229, 234, 20A
Weldon, G. P., 174
Wellemeyer, J. F., 19
Wenatchee Junior College, 233
Wentworth Military Academy, 216, 233
Wesleyan Methodist College, 252
Wessington Springs College, 218
West, P. M., 132
West Georgia College, 218, 226, 248
West Virginia, 33, 64, 218, 226, 252
Westbrook Junior College, 80, 128, 142, 212, 235, 250
Western region, 2, 57, 58, 62, 63, 224, 228, 236, 237, 240, 241. *See also* California
Western University, 248, 250
Westminster College (Texas), 222, 233
Westminster College (Utah), 252
Wetumka Junior College, 233
Whitworth College, 220, 230, 235
Why Junior College Terminal Education?, v, 14, 59, 60, 93, 180, 194
Wildlife management, 85
William Woods College, 115, 129, 142, 216, 251, 39A
Williams, J. T., 132
Williams College, 224
Williamsport Dickinson Seminary, 113, 143, 212, 233, 252
Wilson, T. H., 20
Wingate Junior College, 220
Winslow, G. M., ii
Winslow, P., viii, 1
Winter project, 152
Wisconsin, 33, 218, 252
Wisconsin, Extension Division of University of, 218, 234, 252
Wood Junior College, 220, 235, 251
Woodrow Wilson Junior College, 125, 173, 214, 226, 234, 250. *See also* Chicago junior colleges
Woodward Junior College, 218, 234, 251
Woodworking, 111
Worcester Junior College, 212, 230, 231
Work plans, cooperative, 141
Worthington Junior College, 100, 139, 142, 216, 234, 251
Wright, J. C., ii
Wright Junior College, ii, 88, 92, 125, 139, 169, 190, 214, 226, 234, 250, 3A, 14A, 27A. *See also* Chicago junior colleges
Wyomissing Polytechnic Institute, 140, 252

Y

Yakima Valley Junior College, 224, 234, 252
Yale University, 104
Young, G., 153
Young L. G. Harris College, 218, 230
Yuba Junior College, 89, 115, 144, 224, 249

Z

Zook, G. F., ii, 16

129 482

UNIVERSAL
LIBRARY